The Mining Journal,

RAILWAY AND COMMERCIAL GAZETTE.

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.

No. 698.—Vol. XIX. LONDON, SATURDAY, JANUARY 6, 1849. [Price 6d.

STEAM-ENGINE AND MINING MATERIALS FOR SALE.

MR. WILLIAM BROWNE has received instructions to SELL, BY PUBLIC AUCTION, on Tuesday, the 16th January next, and following day, at Ten o'clock in the forenoon, the whole of the PLANT of MATERIALS and MACHINERY belonging to the GREAT HEWAS MINE, near ST. AUSTELL, CORNWALL, Consisting of a 66-inch cylinder STEAM-ENGINE, with two boilers, about 26 tons.
A very good BOILER, about 12 tons, lying on Hallenbeagle Mine, near Blackwater.
A 40-feet WATER-WHEEL, 4 feet breast, oak axle, iron sockets, with 16-head stamps attached, iron lifters, &c.
A 22-feet ditto, 3 feet 9 inch breast, ditto ditto, 8-head stamps attached, ditto.
A 18-feet ditto, 22 inch breast, ditto ditto, 6-head stamps attached, wood lifters.
A 12-feet ditto, 2 feet 9-inch breast, ditto ditto, 4-head stamps attached, ditto.
10 9 ft. 20 in., 14 9 ft. 12 in., 2 9 ft. 11 in., and 6 9 ft. 9 in. pumps; 4 matching pieces; 1 12 ft. 20 in., 1 12 ft. 8½ in., 1 9 ft. 13 in., and 1 9 ft. 8 in. working barrel; 1 6 ft. 13 in. door-piece; 2 6 ft. 20 in. double door-pieces; and 2 6 ft. 8 in. double door-pieces; 2 6 ft. 20 in., 1 9 ft. 13 in., 1 9 ft. 9 in., and 1 5 ft. 8 in. windbore; 3 branch pipes; 73 fms. of 11-in. main rods, with rod-plates, pins, &c.; bucket-rods and plates; 5 horse-whims, shaft tackle, and kibbles, complete; large capstan and shears; 1 balance-bob; 180 fms. 10-in. capstan rope; 300 fms. 5½ inch and 140 fms. 5-in. whim-rope; 700 fms. tackle and other ropes; 42-in., 40-in., and 34-in. smiths' bellows; 3 anvils, 2 vices, smiths' and miners' tools, new and old iron, double crab winch, screwing stocks, taps and plates, 150 fms. 4-ft. launders, ladders, buddles, racks, trunks, chests, barrows, a large quantity of excellent timber, &c.; together with all the counting house furniture, and all the fixtures on the mine.
The above materials, which have been placed on the mine within the last two years, have been carefully selected, and are, in general, quite equal to new. An early attendance is requested, as the whole must be sold in two days.
Any information may be obtained of Richard Pearce, Esq., Penzance; Capt. Trevena, on the mine; or of Mr. William Brown, auctioneer and appraiser, Charlestown, St. Austell.—Dated December 26, 1848.

A FREEHOLD ESTATE, in the county of BRECON, containing 200 acres of Arable and Wood Lands, rich Veins of Iron Mine, Fire Clay, &c.

MR. M. WHITTINGTON has been instructed to OFFER FOR SALE, BY AUCTION, at the CASTLE HOTEL, NEATH, on Thursday, February 1, 1849, between Two and Three o'clock in the afternoon, subject to such conditions as shall then be produced, in Two Lots,

LOT I.—All that valuable FREEHOLD FARM and LANDS called CEFN-TROSGOOD, situate in the parish of Ystradveltu, in the county of Brecon, and containing, by estimation, 200 acres of arable and wood land; a substantial-built dwelling-house, with all necessary out-buildings; also, all the IRONSTONE and other MINERALS contained on the property. There is a right of common on the Great Forest of Brecon, for depasturing 200 sheep, 14 ponies, and 26 head of cattle, at the moderate sum of 15d. per annum.

LOT II.—All those rich VEINS of BLUE and YELLOW FIRE-CLAY, situate under Lot I., and known as the celebrated Dynas Fire-Clay, now in the occupation of Mr. Chas. Roger Harris, under a lease for 60 years, 8 of which have expired, at the sleeping rent of £100 per annum, or 16d. per ton royalty. There is a tramroad from the works to the Neath Canal Navigation. The property is delightfully situated in the upper part of the Vale of Neath, within 200 yards of the turnpike-road to Brecon, 1¼ mile of the Neath Canal Navigation, 1 from the Vale of Neath Railway, and midway between Brecon, Neath, and Merthyr.

Further particulars may be had on application to Mr. John Thomas, postmaster, Glyn-Neath, who will get the property shown to parties wishing; or to the auctioneer, Post-office, Neath.

MALLEABLE IRON-WORKS AND PROPERTY FOR SALE, BY PRIVATE BARGAIN.

MALLEABLE IRON-WORKS.—These large WORKS, belonging to the WEST OF SCOTLAND MALLEABLE IRON COMPANY, situated at MOTHERWELL, in the parish of DALZIELL and county of LANARK, consisting of REFINERY FIRES, FORGE, RAIL, ROLLING, SLITTING, HOOP, PLATE, and SHEET MILLS, and, with a little further outlay, capable of producing about 500 tons of finished iron weekly.
These works, which have been erected on the most approved plan, have been in operation since May, 1847; and, besides rails, can be made to turn out all the sizes and varieties of iron usually required by the trade.
There are on the ground 4 blowing engine of about, say 80-horse power, for refineries, 2 forge and 2 mill engines, condensing and that work expansively, each about 100-horse power. Between the mill engines there is a small subsidiary high-pressure engine, of about 40-horse power, for driving the guide mills. There are likewise one lathe and one pumping high-pressure engines, each about 20-horse power. All these engines, with one exception, are in first-rate working order.
Attached to the works are smiths', wrights', and fitting-up shops, with turning lathes, cranes, &c., complete. Also, offices, stables, stores, mill manager's house, and 98 workmen's houses, besides ample accommodation in the village of Motherwell immediately adjoining.
These works are most favourably situated, being surrounded by coal and pig-iron works; and, as the Caledonian Railway forms one of the boundaries of the works, railway communication to all parts of the kingdom is afforded; and, besides the existing accommodation, a direct communication with the Harbour of Glasgow, distant 10 miles, will be had on the opening of the Clydesdale Junction Railway, which is now nearly completed.

ESTATES OF BRAIDHURST AND MILTON.

These ESTATES consist of 390 acres or thereby, on which there is an excellent farm steading, with out-houses and cottars' houses sufficient for a large farming establishment. The grounds having been for some years in the hands of the proprietors, are in the best condition.
The lands contain minerals. The coal has been wrought at a moderate depth, for the last 12 months, for the supply of the works, and has been proved to be of excellent quality. The upper seam of coal, 4 feet thick, has been found by bores in several parts of the lands, and is of equal quality; and there is no doubt that all the usual seams of the district run through the property.
The Feu duties exigible from the buildings on the lands, including the village of Motherwell, which amount to about £300 per annum, will be sold with the lands.
These lands, with the minerals and Feu duties, will be sold either apart from, or along with the works.
For further particulars, application may be made to Mr. Lawrence Hill, jun., at the works, at Motherwell; Mr. James Anderson, at the company's office, 88, St. Vincent-street; or Messrs. Moncrieff, Paterson, and Forbes, 45, West George-street, Glasgow, in whose hands are the title deeds of the property.
Glasgow, January 2, 1849.

TO BE SOLD, OR LET ON ROYALTY, the DARLASTON GREEN COLLIERY AND IRONSTONE MINES,
In the district of SOUTH STAFFORDSHIRE, now working by the "Galvanised Iron Company."
These MINES comprise about 26 acres, held under lease, of which about 23 years are unexpired. They contain all the measures of IRONSTONE usually found in that locality—the excellence of the quality of which is well known, and a small portion of the New Mine Coal, the greater portion of which has been worked. The mines have recently been opened, and drained at a considerable expense, and are now in complete working order. There are a sufficient number of shafts sunk on the estate to get the whole of the mines; and a very trifling outlay will open the measures of ironstone which are not now at work.
The PUMPING and WINDING-ENGINES are perfectly EFFECTIVE, and all the PLANT in EXCELLENT REPAIR. The Birmingham Canal runs into the estate, and there is abundant demand for the produce of these mines at the surrounding iron-works.
For further particulars, apply at the office of the Galvanised Iron Company, 3, Mansion-house-place, London; or to Mr. Taylor, King Hill-field, Darlaston.

TO BE SOLD, OR LET ON LEASE (FREEHOLD), the PHŒNIX IRON-WORKS, WEST BROMWICH,
In the district of SOUTH STAFFORDSHIRE, at present carried on by the "Galvanised Iron Company."
These WORKS, which are amongst the most eligible and complete in the district, comprise the following MILLS and FORGES—viz.:
1. An ENGINE, of 100-horse power, by Boulton and Watt, in brick engine-house, with two 35-feet boilers, and all the requisite machinery, of the best description, recently erected, driving a forge; a 20-inch BOILER-PLATE TRAIN, and a RAIL MILL—appended to which is a small ENGINE, of 10-horse power, with two PUNCHING and STRAIGHTENING MACHINES for RAILS—complete.
2. An ENGINE, of 80-horse power, by J. and G. Davis, in brick engine-house, with three 35-feet boilers, with powerful machinery, driving a forge; an 18-inch BOILER-PLATE and SHEET MILL; and a 16-inch TRAIN, for the manufacture of Bars, T Iron, and Angle Iron. Attached to this work, is an ENGINE, of 20-horse power, on cast-iron frame, driving a small 8-inch MERCHANT TRAIN, SAW, and TURNING-LATHE.
With these Mills and Forges are 34 PUDDLING and HEATING FURNACES—the whole standing on about two acres of freehold land, bounded by the main road on one side, and by the Birmingham Canal on the other, on which are the necessary wharfages for the use of the works.
The capacity of the works is equal to about 350 to 400 tons of finished iron weekly.
Adjoining the works on a separate tenure, are a MANAGER'S HOUSE, with about FIVE ACRES of LAND, and FOUR WORKMEN'S HOUSES.
There is an extensive assortment of ROLLS, for the manufacture of the various descriptions of iron for which these works have long known, and for which there is an extensive and established connection—the whole forming a most complete and valuable establishment for the supply of manufactured iron in all its branches.
For further particulars, apply either at the offices of the Galvanised Iron Company, 3, Mansion-house-place, London; or to Mr. Spencer, on the premises.

MONEY.—MESSRS. KILLICK & CO. (late Wisstanley, Killick, & Co.), SHAREBROKERS, inform their friends and the public, they make IMMEDIATE ADVANCES, to any amount, on the deposit of English and Foreign Railway Shares, Scrip, and Debentures, upon exceedingly advantageous terms: they also BUY and SELL every description of STOCK and MINING SHARES, at much less commission than usually charged.—6, Bank Chambers, opposite Bank of England.

Stannaries of Cornwall—In the Vice-Warden's Court.

PURSUANT to a DECREE of the VICE-WARDEN'S COURT, made in the cause of BICKFORD and OTHERS v. RICHARDS, the CREDITORS, in respect of TRENOW CONSOLS MINE, in the parish of PERRANUTHNOE, within the said Stannaries, are, on or before the 19th day of January inst., to come in and PROVE their DEBTS before the Registrar of the said Court, at his office in Truro; or, in default thereof, they will be peremptorily excluded the benefit of the said decree.—Dated Registrar's Office, Truro, Jan. 3, 1849.

VALUABLE MINE PROPERTY TO BE SOLD, BY TENDER—GREAT MICHELL CONSOLS MINE AND MATERIALS,
COMPRISING

1 9-feet 12-inch pump	Block and tackle ropes
1 7-feet 10-inch ditto	Chains and bevels
1 9-feet 10-inch ditto	Triangles and windlasses
19 9-feet 9-inch ditto	Whim and other kibbles
2 6-feet 9-inch ditto	Candle and other chests
1 4½-feet 9-inch ditto	Screw stocks, taps, and plates
7 9-feet 8-inch ditto	Dressing tools and underground barrows
1 10-feet 7-inch ditto	Grease and nails
1 3-feet 8-inch ditto	Ladders, about 50 fathoms
1 10-feet 7-inch windbore	2 Beams, scales, and stand
1 10-feet 6-inch ditto	Bell and stand
1 6-feet 7-inch doorpiece and door	Bucket prongs and brasses
3 6-feet 8-inch ditto	Grindstone and stand
1 7-feet 7-inch working barrel	Castings of angle-bob, with saddles and brasses
1 10-feet 7-inch ditto	Clack seatings
1 9-feet 8-inch ditto	2 Large pulleys, and 1 whim ditto
1 10-feet 8½-inch ditto	Shaft tackle, with pulleys
1 7-inch plunger bottom, with pole, stuffing-box, and gland	Miner's dial, with quadrant attached
8-arm capstan, with oak axle, shears, pulleys, and brasses	Office furniture
70 Fms. 10-inch capstan-rope, nearly new	1 Large and 1 small pair of blocks
Sundry lots of timber, plank, air-machines and pipes	Old cast-iron Brass
Sundry iron, new and old	Old wrought-iron
42-inch smith's bellows, nearly new	Pair of connection caps and brass
38-inch ditto	Miners' tools
Underground iron and wood-rods	Smiths' trough
Horse-whim, and part of 1 old ditto	Large cistern
Whim-rope	Knocker, line, and stand
Smiths' tools	Plane, augers, gimblets, hatchets, & saw
Steel, anvil, and vice	Samp-house grates
	Oil White lead
	2 Wood matchings

Also, a very powerful WATER-WHEEL, 45-feet diameter, 8-feet breast.
About 155 fathoms of 2½ horizontal-rods—complete.
One main-bob at shaft, and two other bobs; hanging and other shaft-rods.
Rod pulleys, with saddles and brasses.
The above Materials are in good condition, having been used only about Three Years.
This very valuable SETT is situated about 7 miles from Bodmin, and 4 from Camelford, in the parish of SAINT BREWARD, county of CORNWALL, in lands of Sir H. Onslow, at 1-15th dues, for 21 years, about 19 of which are unexpired, and is now offered FOR SALE, together (in one lot) with the MATERIALS. There are three lots in the sett, and but partial trial to one given. The Great South Lode, which is in places upwards of 10 feet wide, containing an abundance of splendid gossan, mundic, copper ore, spar, and fluor, on which an engine-shaft has been sunk to a depth of 35 fms. below the surface, where several fathoms of ore ground have been laid open, and a winze put down 10 fms. below, and about 10 fms. driven on the course of the lode; the indications here are such as to warrant that, with a very moderate capital, this is to be made a very rich and valuable concern. The geological features throughout the sett are of a highly important character—the principal workings eastward being in granite, while those to the west are in clay-slate (or killas).
Five cross-courses have been met with, which are all at times considered good conductors for copper ores. With the exception of a few shoad pits, and a few fathoms of very shallow adits and openings, the adventurers altogether on the course of the lode will not amount to more than about 150 fathoms, and returns have been already made from this very limited extent of exploration to about £600 worth of copper ore.
The local advantages are without parallel in this county—this very extensive sett being about 1½ mile in length on the course of the lodes, with never-failing streams of water running throughout, available for machinery to any extent, so that the cost of steam-power will not, *at any time*, be required.
The Wade Bridge Railway is within 2 miles of the mine, so that every facility is to be had for the export of ores and import of materials. The buildings on the mine consist of spacious smiths' and carpenters' shops, with other necessary offices.
Sealed tenders to be forwarded to G. Kieckhoefer, Esq., 30, Threadneedle-street, London; or to Capt. T. Richards, on the mine, on or before the 10th January, 1849.

EXTENSIVE AND VALUABLE MINERAL PROPERTY AND IRON-WORKS FOR SALE.—TO BE SOLD, BY PRIVATE CONTRACT,
THE VENALLT COAL AND IRON-WORKS,
Situate on the south side of the RIVER NEATH, GLAMORGANSHIRE, about 8 miles from the port of Neath, and 14 from the port of Swansea, with all the necessary appendages for carrying on the smelting of iron, and an extensive shipping trade of stone coal and stone coal culm.
The property comprises long leases of coal and ironstone, extending over about 3000 acres of land, in a ring fence, which are taken on favourable terms. The coal is anthracite, and three veins, of an aggregate thickness of about 25 feet, are effectually opened by level, for the supply of 100 to 200 tons per day.
The ironstone veins are abundant and rich, and sufficiently opened by level to yield an ample supply for three furnaces. There is also valuable black-band, extending over a large acreage.
The works consist of an engine-house for a pair of engines, one 50-horse high-pressure blowing engine, two blast-furnaces, with all the necessary hot-blast stoves, casting-houses, foundry, finery, &c.
The works and colliery are in operation, and any person who may be desirous of purchasing, will be treated with on liberal terms.
Reports recently made on the property, by Messrs. John Southan, of Bilston, and W. P. Struvé, of Swansea, may be seen on application to Messrs. Jevons and Wood, Neath; Messrs. Llewellyn and Randall, solicitors, Neath; or to Messrs. Rowland, Hacon, and Rowland, solicitors, 38, Threadneedle-street, London.

CWMBRAIN PATENT IRON REFINERY.—The PROPRIETORS of IRON FORGES and MILLS are respectfully INVITED to MAKE TRIAL of Mr. BLEWETT'S REFINED IRON, or METAL, PREPARED by a NEW PATENT PROCESS,
whereby the IRON is completely FREED from the IMPURITIES CONTRACTED in the BLAST-FURNACE, and, by judicious mixtures, rendered applicable to every kind of manufacture. Heretofore, the metal usually sold in the market has been produced from the worst pigs, scraps, and refuse of some particular blast-furnace, or set of furnaces, without any mixture, or any regard to quality, or the purpose for which it might be required. The PATENT METAL is PREPARED ON SYSTEM, and TO ORDER, for any of the following purposes:—
1. For BOILER and TANK-PLATES.
2. For TIN-PLATES, commonly called COKE-PLATES.
3. For STRONG CABLE BOLTS, RIVET, and ANGLE IRON.
4. This COMPOUND PUDDLED, beat under the hammer into a bloom, reheated, and rolled into a 6 or 6½-inch bar, makes TOPS and BOTTOMS for FLANCH and OTHER RAILS, of very superior quality, and attended with less waste than any other kind of iron used for that purpose. It is also well adapted for nail-rods, horse-shoes, and for other ordinary uses of the blacksmith.
The PATENT METAL is marked with a squirrel, and the initials "R. J. B.," and is to be had only at the "Cwmbrain Iron-Works," near Newport, Monmouthshire.

FOURDRINIER'S PATENT SAFETY APPARATUS, for PREVENTING ACCIDENTS IN MINES AND OTHER PLACES, WHEN THE ROPE OR CHAIN BREAKS.
By the ADOPTION of this INVENTION the LIVES of the WORKING MINERS may be PRESERVED, and the PROPERTY of the MINE OWNERS PROTECTED from the serious consequences of either of the following accidents—viz.:
1. From the men, or the load, being precipitated to the bottom of the shaft when the rope or chain breaks: in this case the apparatus is *self-acting*.
2. From either the men, or load, being drawn over the pulley: in this case, also, the apparatus is *self-acting*.
3. From the fearful consequences to men or load of a "whirl," or run: in this case the result is equally *certain*.
A COAL PIT, with the SAFETY APPARATUS ATTACHED to the CAGE, is daily at WORK near BURSLEM, in the STAFFORDSHIRE POTTERIES.
To inspect the apparatus, or to obtain any further information, application may be made to Mr. Edward N. Fourdrinier (the patentee), Cheddleton, near Leek, Staffordshire; or to Mr. Joseph Fourdrinier, 9, College-place, Camden Town, London—who are prepared to GRANT LICENSES for the USE of the PATENT.

PATENT IMPROVEMENTS IN CHRONOMETERS, WATCHES AND CLOCKS.—E. J. DENT, 82, Strand, and 33, Cockspur-street, watch and clock maker, BY APPOINTMENT, to the Queen and his Royal Highness Prince Albert, begs to acquaint the public, that the manufacture of his chronometers, watches, and clocks, is secured by three separate patents, respectively granted in 1836, 1840, 1842. Silver lever watches, jewelled in four holes, 6 gs. each; in gold cases, from £3 to £10 extra. Gold horizontal watches, with gold dials, from 8 gs. to 12 gs. each.
DENT'S PATENT DIPLIEDOSCOPE, or Meridian Instrument, is now ready for delivery.—Pamphlets containing a description and directions for its use 1s. each, but to customers gratis.

CHARCOAL ON SALE—ONE POUND PER TON, in large quantities. OGDEN, BROTHERS, Sunderland.

MILL FOREMAN WANTED.—The Valentia Slab Company REQUIRE a MAN of firm and energetic character, accustomed to the superintendence of men moving heavy masses and cutting hard materials accurately into shape, to take the ACTIVE MANAGEMENT of their SLATE SAWING WORKS, in the island of VALENTIA, IRELAND. Two steam-engines are employed to work the saw-mills, and no regular fitter being engaged, the applicant must be competent and willing to assist, when necessary, in machinery repairs.—Salary £150 and house room.
Apply, stating full qualifications, to Mr. William Walton, clerk of the company, 4, Trafalgar-square, Charing-cross.

TO ROPE AND CORDAGE MANUFACTURERS.—Mr. D. E. COUCH, PATENT ROUND and FLAT ROPE MANUFACTURER, wishing to extend his trade, would be glad to receive a PARTNER, on liberal terms. The premises are extensive, and of a first-rate description, and held under a lease for a long unexpired term. The machinery and plant for the make of round and flat rope are in excellent condition, and the premises replete with every convenience for an extensive trade, which the contemplated improvements by floating the harbour will ensure.
This offers a most desirable opportunity to one of the trade, or to small capitalists desiring income.—Apply to Mr. D. E. Couch.
Swansea, Dec. 22, 1848.

TO BE SOLD, a PUMPING-ENGINE, 30-inch cylinder, 9 ft. stroke, built by Mr. West, engineer, nearly new—only been worked about three years—no engine ever done better duty when at work; together with a SEVEN-TON BOILER, SPRING BEAM, and first set of rod-shaft attached, for £400. The engine is within a few miles of a good shipping port, being near Liskeard—one good road.—For particulars apply to Capt. Osburn, Liskeard; or Mr. Wm. Rendle, Octagon, Plymouth.

STEAM-ENGINE FOR SALE.—TO BE SOLD, a 12-horse power HIGH PRESSURE STEAM-ENGINE, with or without boiler, quite new.
Also, a CORNISH BOILER, between 8 and 9 tons, quite new.
A WATER-WHEEL, 36-feet diameter, 4-feet breast, with wrought axle, cast-iron sockets, plumber blocks and brasses, nearly new.
Also, other SECOND-HAND MINING MATERIALS.
Apply to J. E. MARE, Plymouth Foundry.

STEAM-ENGINES.—From 8 to 20-horse power ENGINES ALWAYS IN STOCK.
Apply to Mr. CAPPER, Engine-Maker and Founder, BIRMINGHAM.
Price—£12 to £16; with boiler, £22 per horse.

STEAM-ENGINE INDICATORS.—Mr. W. K. WHYTEHEAD, C.E., begs to inform the Engineering Profession, that he has a STOCK of STEAM-ENGINE INDICATORS, of the best construction, ON SALE.
Also, McNAUGHT'S IMPROVED APPARATUS for TESTING the LUBRICATING VALUES of OILS.—London Office, 3, Sherborne-lane, City.
Agent for McNaught's Patent Double Cylinder Engine.

RUNNAFORD COOMBE MINE.—A FEW SHARES are to BE DISPOSED OF in the ABOVE MINE, at £3 per share.—Apply to Mr. Broughton, 30, Tayler's-buildings, Woolwich.

MINING OFFICES, No. 8, GEORGE-YARD, LOMBARD-STREET, LONDON.—Mr. RICHARD THOMAS (who has had 20 years' experience as a mining agent in London) OFFERS his SERVICES to the PURCHASE and SALE of MINE and OTHER SHARES, on commission. Purchases in many valuable mines may now be made at unprecedently low prices. The fullest information given (without charge) relative to mining investments and operations.
N.B.—R. T. has now ON SALE a limited number of SHARES in an undertaking offering unusual advantages, situated in one of the best mining districts in Cornwall.
Full particulars will be furnished on application.

MINING OFFICES, THREE KING'S COURT, LOMBARD STREET, LONDON.—Messrs. R. TREDINNICK & CO. beg to draw the attention of capitalists to the DEPRESSED MARKET VALUE of SHARES in ENGLISH and FOREIGN MINES, many of which pay dividends of from 20 to 30 per cent. per annum, whilst those on the eve of so doing are selling at corresponding low prices.—Messrs. T. & Co. continue to DEAL in every description of MINING, RAILWAY, BANKING, INSURANCE, CANAL, and OTHER SHARES.—Statistical information afforded gratuitously, upon personal application.—MONEY ADVANCED upon the above securities.

MR. THOS. P. THOMAS, MINING AGENT, AND DEALER IN RAILWAY, GAS, BANK, INSURANCE, AND OTHER SHARES.
3, *GEORGE-YARD, LOMBARD-STREET, LONDON.*
T. P. THOMAS is a SELLER of SHARES in the leading MINES of Cornwall, Devon, and Wales—paying from 10 to 30 per cent.—Statistical information afforded upon personal application, or by letter.

MR. JAMES STRIDE, MINING, SHARE, AND GENERAL AGENT, 27, SPRING-GARDENS, LONDON, has FOR SALE, SHARES in the BEST DIVIDEND-PAYING and OTHER MINES.

MR. GEORGE BATE, Jun., CIVIL ENGINEER AND SURVEYOR, *WOLVERHAMPTON.*
Offices in Queen-street, corner of Piper's row.
N.B.—UNDERGROUND MINING SURVEYS accurately executed.

JAMES LANE, MINING SHARE DEALER,
80, *OLD BROAD-STREET, LONDON.*

AUSTRALIAN MINING COMPANY, 1, Adelaide-place, Dec. 18, 1848.—The board of directors hereby give Notice, that they have made a CALL of TEN SHILLINGS per share on the REGISTERED SHARES in the company, to be PAID on or before the 10th day of January, 1849, to the company's bankers, Messrs. Masterman, Peters, and Co., Nicholas-lane, Lombard-street, London. Interest at the rate of 5 per cent. per annum, will be charged on all calls not paid on or before the 10th day of January. The call letter must be presented at the bankers at the time of payment.
N.B.—The transfer books of the company will be closed from Wednesday, the 27th Dec., until Wednesday, the 17th January, 1849. By order of the board,
J. A. JOSEPH, Secretary.

BEDFORD UNITED MINES.—DECLARATION OF DIVIDEND.—Notice is hereby given, that a DIVIDEND of FIVE SHILLINGS per share on the shares of these mines, will be PAYABLE at this office on Friday, the 22d December inst., and every succeeding Friday, between the hours of Eleven and Three o'clock, to such shareholders as shall give notice to the secretary personally, or by letter, of their intended application, two clear days before either of the above-named days of payment. By order of the meeting of shareholders, held this day,
5, Threadneedle-street, Dec. 14, 1848. G. KIECKHOEFER, Secretary.

CONSOLIDATED COPPER MINES OF COBRE ASSOCIATION.—Notice is hereby given, that a HALF-YEARLY GENERAL MEETING of the proprietors of this association will be HELD, in conformity with the Deed of Settlement, at the office of the company, No. 26, Austinfriars, on Tuesday, January 23d instant, at One o'clock precisely. On that day, two directors—viz.: George Frobyn and Robert Passenger, Esqrs., and one auditor, Francis Mills, Esq., will go out of office by rotation, but are immediately re-eligible, and are candidates for re-election. It is necessary that parties intending to offer themselves as candidates for the direction and auditorship should leave notice of such their intention with the secretary, at the office of the company, No. 26, Austinfriars, at least 14 clear days before the day of election.
By order of the court of directors, W. LEEKIE, Sec.
26, Austinfriars, January 3, 1849.

RHYMNEY IRON COMPANY.—At the Annual General Meeting of the shareholders of the Rhymney Iron Company, held at the company's offices, on the 15th November last, the following DIVIDEND was declared out of the profits for the year ending the 24th June, 1848:—
£2 per share on each £50 share.
12s. per share on each £15 share.
Less income tax.—PAYABLE one-half on the 10th January, and the other half on the 10th July, 1849. The first portion will, accordingly, be paid at the company's offices on and after the 10th January, 1849. By order of the board,
7, Lawrence Pountney-hill, Dec. 29, 1848. T. E. SCUDAMORE, Secretary.
N.B.—The transfer books will be closed from the 30th inst. to 15th January inclusive.

TINCROFT MINING COMPANY.—Notice is hereby given, that a GENERAL MEETING of the shareholders in the above company will be HELD at this office on Friday, the 19th day of January next, at One o'clock precisely.
44, Finsbury-square, London, Dec. 21, 1848.

CALLINGTON MINES COMPANY
London, January 3, 1849.
At a Quarterly General Meeting of the shareholders in this company, held this day,
RICHARD HODGSON, Esq., in the chair,
The following resolutions were passed:—
Resolved.—That the report and accounts, now read, be received, adopted, and entered in the company's cost and transfer book.—Carried unanimously.
Resolved.—That the best thanks of the shareholders be presented to the chairman and directors for their energetic and able management of this company's property.—Carried unanimously.

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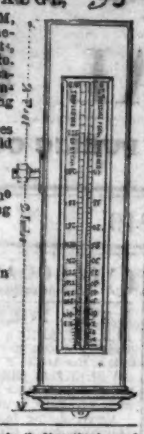

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REVIEWS OF THE WORK.

We feel no hesitation in saying, that there is no member of society by whom the book will not be found useful—whether such person hold the relation of a parent, preceptor, or a clergyman.—*Sun*, Evening Paper.

J. L. Curtis, *On Manhood, and the Causes of its Premature Decline; with Plain Directions for its Perfect Restoration.*—[Strange, Paternoster-row.]—This is a book replete with valuable advice and information. It developes the fearful shoals on which a large proportion of human happiness is wrecked, and furnishes a chart by which they may be avoided and escaped. Fortunate for a country would it be, did its youth put into practice the philanthropic and scientific maxims here laid down. One cause of matrimonial misery might then be banished from our land, and the race of the enervate be succeeded by a renewal of the hardy vigorous spirits of the olden time.—*United Kingdom Magazine.*

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PART THE FIRST treats of the anatomy and physiology of the reproductive organs, and is illustrated by six coloured engravings.—PART THE SECOND treats of the consequences resulting from excessive indulgence, and their lamentable effects on the system, producing mental and bodily weakness, nervous excitement, and generative incapacity; it is illustrated by three explanatory engravings.—PART THE THIRD treats of the diseases resulting from infection, either in the primary or secondary form, and contains explicit directions for their treatment. This section is illustrated by 17 coloured engravings.—PART THE FOURTH contains a prescription for the prevention of disease by a simple application, by which the danger of infection is obviated. This important part of the work should not escape the reader's notice.—PART THE FIFTH is devoted to the consideration of marriage and its duties. The causes of unproductive unions are also considered, and the whole subject critically and philosophically inquired into.

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Transactions of Scientific Bodies.

MEETINGS DURING THE ENSUING WEEK.

THIS DAY	Asiatic—8, New Burlington-street	3 P.M.
MONDAY	Geographical—3, Waterloo-place	8½ P.M.
	British Architects—16, Grosvenor-street	8 P.M.
	Medical—Bolt-court, Fleet-street	8 P.M.
TUESDAY	Medical and Chirurgical—53, Berners-street	8½ P.M.
	Civil Engineers—25, Great George-street	8 P.M.
	Zoological—11, Hanover-square	9 P.M.
	Syro-Egyptian—71, Mortimer-street, Cavendish-square	7½ P.M.
WEDNESDAY	London Institution—Finsbury-circus	7 P.M.
	Graphic—Thatched House Tavern	8 P.M.
	Pharmaceutical—17, Bloomsbury-square	9 P.M.
	Literary Fund—73, Great Russell-street	3 P.M.
THURSDAY	Royal—Somerset-house	8½ P.M.
	Antiquaries—Somerset-house	8 P.M.
	Royal Society of Literature—St. Martin's-place	4 P.M.
FRIDAY	Astronomical—Somerset-house	8 P.M.
SATURDAY	Westminster Medical—17, Saville-row	8 P.M.

The Poetry of Science.

Mr. ROBERT HUNT (author of the attractive work just published under the title of the *Poetry of Science*) delivered a lecture upon this interesting subject, at the Western Literary Institution, Leicester-square.

The talented lecturer commenced by observing, that he had been asked on more than one occasion, what he meant by the *poetry of science*—the connection between poetry and science having apparently puzzled many persons. He should, therefore, first explain what he really did mean by the expression. Under the term POETRY, we had been too much in the habit of comprehending only verse; or, at least, only verse and some particular kinds of prose. The harmonious arrangement of words, the beauty of versification, and the charms of rythm were, no doubt, elements of poetry, but they were not essentially the only elements. An imaginative description of Nature, or rather, the evoking of grand ideas from natural objects, was generally considered an essential element of excellence in poetry. All the great poets—Shakspeare, Milton, and the rest—had drawn from the works of Nature their sublimest inspirations: the vesture with which Nature had clothed the earth, as Goethe expressed it, was the fountain at which all true poets drank; or, as Shelly had sung in most harmonious strains:—

"Look on yonder earth—
The golden harvests spring; the unfading sun
Sheds life and light; the fruits, the flowers, the trees,
Arise in due succession; all things speak
Peace, harmony, and love. The universe,
In Nature's silent eloquence, declares
That all fulfil the works of love and joy!"

In external Nature, with its beauty of form and colour, its variety and its life, we recognised—we felt—the poetic elements. We passed over the surface and exclaimed, "It is beautiful!" Yet, in our ignorance, we had failed to allow that any of the mysterious workings by which the whole is formed can possess poetic character. To look upon the earth, notwithstanding all the beauty of its external character, without examining its psychological mysteries and its great cosmical arrangements, would be like looking upon a human body divested of soul. They might, however, depend upon it, that there were really "tongues in trees and sermons in stones," from which might be drawn poetry as sublime as any which owned for its parent the psychological grandeur and external beauty of this wondrous earth. The powers which built or held together a stone—powers which required the most careful search of the man of science—had a higher and nobler poetry than that which belonged to the external vesture of this beautiful world. Let them take a rude stone, a non-crystalline mass, and ask by what power its particles were held together. That question at once opened up a train of reflections which would lead to very remarkable conclusions. He had there [holding up a piece of granite] a mass as hard as adamant which, at one time, moved in a fluid state. The evidence of its having flowed existed in the fact that in it were mixed up rolled pebbles, which must have been long subjected to the action of running water; and the mass of felspar, mica, and silica, in which those pebbles were embedded, must, therefore, once have been a fluid. It was now so hard, that it would resist a very considerable mechanical force, while other masses—as, for instance, a piece of chalk—would be broken in pieces by a very slight blow. It would, therefore, at once be seen, that the power which held together the particles of chalk and of granite were not equally energetic. The cohesive force by which the minute particles of the chalk were held together was of the same character as that which hardened the granite—each of these particles, whether of the hard or the soft stone, was surrounded by a power which locked the whole together.

Before proceeding farther, however, he would allude to a question which had long agitated the world of science—viz., that of the divisibility of matter—whether matter was infinitely divisible, or whether there was a certain point, beyond which it could no longer be divided. The doctrine of indivisibility was supported by all metaphysical philosophers: chemical philosophers, on the other hand, contended that there were certain points beyond which matter could not be separated. These points they called atoms, a combination of atoms was called a molecule, and compound molecules were particles, with this difference, that the chemical character of a molecule, like that of its parent atoms, could not be changed by the art of a chemist, although it could be divided into the atoms of which it was originally formed. A particle, on the other hand, was capable of change. The talented lecturer then proceeded to show, by several interesting experiments, the almost infinite divisibility of certain substances, as evidenced by their extraordinary tenuity; one single grain of sulphate of indigo, for instance, would colour deeply 12 gallons of water. This looked like infinite divisibility; but when they come within the range of chemical action, they found an inevitable necessity that no bodies could be united except in definite proportions. For instance, one atom of hydrogen and one atom of oxygen formed water; but the oxygen was eight times heavier than the hydrogen; and in no other proportion than *eight*, or the multiple of eight, could oxygen be united with hydrogen. Again, the combining proportion of carbon was *six*; and whether they examined the carbon in the tallow of a candle, in the gas which was then burning, or in the paper on which his notes were written, they would find the proportion of carbon was six, or some multiple of that number. It was the same through the whole range of chemical substances; hence it would appear that matter was not infinitely divisible.

There were also a certain class of philosophers who were disposed to deny the entity of matter—who held that matter was nothing more than the exhibition of certain properties or powers—as, for instance, if from any mass were to be removed its hardness, or any other peculiar property it possessed, it would no longer be matter—that as all things come from nothing, so all must return to nothing—in short, that nothing is the mathematical zero, and that that is infinity and eternity. Other philosophers asserted that everything is nothing more than a modified form of motion, as by friction, light, heat, and electricity can be produced, and that those powers can be resolved one into another by different degrees of excitation. But although they might thus ring the changes on these forces, they did not change the one into the other. It was true we were but imperfectly acquainted with the mystery of those forces; but he (the lecturer) regarded them as separate properties or powers; and where they were manifested in the same manner, it was because they were excitable by the same influence. This class of philosophers certainly laid hold of a striking illustration of their theory, when they laid claim to the production of the electrical spark as the result of motion. The new and beautiful electrical light, said they, was produced by chemical action upon the zinc in the voltaic battery—to excite which motion was necessary. The result of that motion being communicated along the range of wire, to the the charcoal points, an intense amount of heat was evolved, and the remarkable electric light produced. That all this was produced by chemical action was certain; but when they reflected that every single particle of matter contained, locked within it, those mysterious agents, heat and electricity, it might be very well understood, that in a state of excitation, those latent powers might be developed. If any body were rapidly rubbed, warmth would be developed, that which was before in a latent state having been excited. Matter, however, could not be destroyed, whatever changes of form it might be made to undergo. Thus, the electric light and heat, if they could be measured exactly, would be found to be a precise equivalent for the chemical action going on in the voltaic battery, the light and heat produced being in exact proportion to the number of equivalents destroyed; and although there was no actual combustion where the light appeared, something analagous to that process was going on in the battery. Whatever powers might be referred to motion, it was obvious that motion could not be had without implying a mover. Unless a primary mover were referred to, how did they account for the motion of the earth on its axis, or round the sun, or the still more remarkable motion of the solar system, probably towards the Pleiades, the centre of all, the precession of the equinoxes, or the rotation of the earth?

Having disposed of these embarrassing fallacies, he addressed himself to the question, what are the forces by which the particles of matter are held together? What was the force by which this mass of chalk was held in the condition they now saw it? They knew it was made up of minute particles, the cohesiveness of which was easily destroyed by mechanical force. It was, moreover, more easily destroyed by chemical action: for if a lump were put into water, the cohesive power would become absorbed, and the mass broken up. The action of the water overcame the cohesive power; but if a little acid were added, a new chemical action resolved the chalk into another condition. As the acid reached the bottom of the vessel, small bubbles of gas escaped, and presently, the mass of chalk which had been completely opaque for light, was suspended in the water, and became actually transparent for light. This experiment showed that the most solid substances might be produced from mere vapour; a fact, indeed, which was put past a doubt by the experience of iron smelters, who found that a considerable quantity of metal was conveyed away with the gases evolved from the ores submitted to the intense heats of their furnaces. Meteoric iron, (of which the lecturer exhibited a beautiful specimen, seen to fall near Mexico) instead of coming from the moon, as was popularly supposed, was more probably produced from the upper regions of our own atmosphere. After an allusion to the nebulous theory of Herschell, and the ferruginous fancies of Zantedeschi, the latter of which, although untenable, appear to confirm the theories of Fursinicri, and Dr. Dalton, who attributed the aurora borealis to some particular action upon a ferruginous atmosphere; he proceeded to explain the remarkable phenomena of molecular forces, in respect to which the recent discoveries of Professor Faraday had lifted the corner of the veil, which as yet overhung the subject. All bodies were, so to speak, magnetic—they either attracted or repelled. If iron filings were placed on a sheet of paper, and put upon a magnet, they would immediately arrange themselves in curved lines. The repulsive, or diamagnetic lines, which might be exhibited in like manner with filings of bismuth, would cross the magnetic meridian at right angles. This accounted for the direction of mineral veins. The tin lodes in Cornwall ran directly in accordance with the magnetic direction, and lead lodes at right angles. The lecturer exhibited several diagrams, illustrative of the formation of metaliferous strata, as it occurs in some of our most important mining districts.

Mr. Hunt concluded his highly interesting lecture, which was received with loud and repeated expressions of approbation, as follows:—Men of science, carefully working out these remarkable facts, have said, there is no poetry in science; but, independently of that which invests vitality, we find in the truths connected with grosser matter, a wonderously beautiful poetry. The dust which floats so lightly on the summer breezes, is invested with powers which influence every other particle of matter in the universe. Remove, if it were possible, those grains of dust from creation, and even the remotest stars would feel that the balance of forces was destroyed. The perturbation of the planet Uranus, indicates the presence, in the solar system, of another planet far removed from its orbit. The earth is influenced by the motion of other planets, and it is not too much to attribute many of the geological conditions of our earth to the influence of the motion of the solar system, bringing us under the sway of new forces. That this is so, there can be no doubt; and considering this, we may well understand, weighing planet against planet, if any mass of matter here, however small, were annihilated, every planet in the system would feel the disturbance. But matter cannot be annihilated—its form may be changed, but nothing is lost. That which now exists in the solid rock, by the process of natural change, may one day, possibly, become part of a mass animated with life and rejoicing in the gladness of reason. Certain it is, that that which now constitutes the mass of our bodies will be dissipated into thin air—the particles forming muscle and bone will assume other forms—but they cannot die out of Nature. The death of the animal is but a chemical change. A body most delicately formed, with all the elements of destruction ready to work within it, lives, and those elements are restrained by the force of vital power. Whenever a man dies a violent death, the gastric juice, within a few hours, dissolves the coats of the stomach. Vital power alone prevents that self-combustion of the system which takes place the moment vital power is withdrawn. When we reflect on the phenomena involved in the few and imperfect illustrations I have attempted, may we not regard these powers in action as the principle so beautifully indicated in the language of Shelley, in his splendid Chorus of the Earth, in "Prometheus Unbound," and adopt it as truth?

"It interpenetrates my granite mass;
Through tangled roots and trodden clay doth pass
Into the utmost leaves and delicatest flowers;
Upon the winds among the clouds 'tis spread;
It wakes a life in the forgotten dead—
They breathe a spirit up from their obscurest bowers."

And may we venture to predicate the realisation of the conclusion of this sublime song?—

"All things confess man's strength. Through the cold mass
Of marble and of colour his dreams pass.
The lightning is his slave; Heaven's utmost deep
Gives up her stars, and like a flock of sheep
They pass before his eyes, are numbered, and roll on.
The tempest is his steed—he strides the air—
And the abyss shouts from the depths laid bare—
'Heaven, hast thou secrets? Man unveils me; I have none!'"

At least, in conclusion, allow me to hope that I have shown there are even charms in "divine philosophy." It is not—

"Harsh and crabbed, as dull fools suppose,
But musical as is Apollo's lute!"

[The subject will be concluded in another lecture, which will be published in our next.]

NEW METHOD OF CONSTRUCTING PIERS AND BREAKWATERS.

Some time ago, a patent was granted to William Bruce, Esq., of the Temple and of Flimston, Pembrokeshire, for "certain improvements in constructing piers, breakwaters, and other submarine works of stone." As the subject of submarine architecture is now exciting much attention among professional men, in connexion with the formation of harbours of refuge, and is, in fact, one of great national importance, perhaps the following outline of Mr. Bruce's novel plan may not be uninteresting. Mr. Bruce has had two objects in view; first, building under water by means of machinery, and, secondly, the application to such structures of the principle of columnar subsidence, so as to supersede the necessity for a solid foundation. The inventor purposes to attain the first of these objects by a framework of guiding rods, 40 or more in number, dropped perpendicularly into the water, and dependent from a framework or traveller, which is to traverse on a timber staging on each side of the mole or pier, of the same description as that used in building the palaces at Westminster, Pimlico, and other stone-built edifices. The mole is to be built endways, by lowering the blocks of stone, the structure commencing from a given pierhead of bell-work masonry, or wooden piles, and being finished to the top before the following series of blocks are lowered down. The stones, deeply grooved, slide down perpendicularly between the finished wall behind and the sort of pendant gridiron, formed by the guiding-rods, in front. The weight of the iron work keeps the perpendicular face of the wall in its place, while on every two bars a screwjack travels up and down, turned by a rod, the head of which is above water, and worked by men from above, so that 20 men, working 20 screwjacks, screw into their proper places five blocks of grooved stones, to stand in layers upon one another, like the basaltic rocks of the Giant's Causeway, at from 17 to 18 feet below low-water mark up to the surface, in rows of five stones, but actually representing 14 hexagonal or six-sided columnar shafts. The result is, that a continuous dovetail, from front to rear, of stones cut with mathematical nicety in six-sided figures, is produced; and, when attained, the second object contemplated by the patentee—namely, the constructing of a mole, or submarine structure of stone, without having recourse to a solid foundation, is also realized, because, as the dovetail is complete from front to rear, the columns cannot fall either backward or forward; and as the wall itself is screwed sideways by powerful machinery, while building, and the stones are cut of a geometrical figure, which precludes the possibility of any vacancies, these columns can be only moved upwards or downwards. Thus, however soft the sand (unless an actual shaking bog, on which not even a rock itself would find a bed), the columnar hexagonal shafts will find a bottom to subside upon, and any occasional extra subsidence can be remedied by an additional layer of stones placed on the top to the extent of the subsidence. This method solves the difficulty experienced by architects in building on sandbanks and other wasteful foundations, and will prove of great practical utility.—*Liverpool Albion.*

CHINESE ORE.—A vessel which has just arrived in the docks from Canton, has brought 123 tons of copper ore, as a portion of her cargo. This is a somewhat remarkable and interesting importation from the Chinese empire.

Proceedings of Public Companies.

MEETINGS DURING THE ENSUING WEEK.

TUESDAY ..... Anglo-Mexican Mining Company—offices, at One.
Wheal Eliza Mining Company—Queen's Head Inn, Tavistock, at Two.
Colonial Banking Company—London Tavern, at Twelve for One.
WEDNESDAY . Waterford and Kilkenny Railway—London Tavern, at Twelve for One.
Cameron's Coalbrook Steam Coal and Swansea and Loughor Railway—offices, at One.
Alliance Marine Assurance Company—offices, at One.
THURSDAY .... Mining Company of Ireland—offices, Dublin, at Three.
FRIDAY ..... East and West India Dock Company—offices, at Two.

[*The meetings of Mining Companies are inserted among the Mining Intelligence.*]

SOUTH AUSTRALIAN COMPANY.

A half-yearly meeting was held at the offices, New Broad-street, on Friday, the 29th Dec., for the purpose of receiving a report from the directors, and on other business. J. R. TODD, Esq., in the chair.

The SECRETARY (Mr. M'Laren) read the minutes of the last meeting, which were confirmed.—The report of the directors was then read.

The CHAIRMAN, in moving the adoption of that report, said it was hardly necessary for him to trouble the meeting with any observations. He was happy to say, that the colony was going on in a progressive manner, and, before long, he expected the shareholders would receive an adequate return for their capital, and for all the years they had been waiting for it to be productive. He thought the rapid increase of the population, that population being in easy circumstances, and such as was unequalled in any quarter of the world, would of itself insure a fair return for their capital—in fact, the population had doubled in the course of three years, and if that went on, the rental of their town and country lands might be looked to alone for a fair return, independently of other resources. It might be expected that he should say something as to their mines; but, although they expected that interest also to be very productive before long, the directors did not think it necessary to calculate upon it at present. They should take into consideration that the price of copper was very low, and the price of labour was very high. It must also be considered by the shareholders that they were not fully working the company's mines; they were rather testing the value of their mineral property. The directors did not intend to work these mines as a company; it was their desire to test their value only, so as to let them under favourable circumstances. He should be happy to give information on any other point that might be required, and would conclude by moving that the report now read be adopted and circulated amongst the shareholders.

The Rev. Mr. TIMPSON expressed his satisfaction with the general tenor of the report, at the same time he would like to know what return had been furnished for the 4000*l.* and upwards expended on their mineral property?

The CHAIRMAN said that, from the best calculation that could be made, the return was about 480 tons of ore. They could not say how much that would realise; but, taking the present low rate, it might be estimated to produce three-fourths of the whole amount, leaving perhaps 1000*l.* or 1100*l.* for the improvement of their works, an expense that would tell hereafter.

The Rev. Mr. TIMPSON knew there must be a considerable outlay at first.

The CHAIRMAN said, they could not as yet decide on the value of their mines, but they could estimate pretty closely; the produce would be somewhere about 3000*l.*, leaving an expenditure of about 1100*l.*

The Rev. Mr. TIMPSON supposed the next half-yearly report would state the sale of this copper.—The CHAIRMAN: Undoubtedly.

The Rev. Mr. TIMPSON saw there was 30 acres sold to the bishop; he should like to know the price?—The CHAIRMAN said, it was part of a section that would produce a deal of money; another part of it had been sold before. It originally cost the company 100*l.*, or under that amount. What they sold previously to that taken by the bishop realised 750*l.*; his would be an additional 1250*l.*, leaving them still half the section on hand. Thus they had sold to the extent of 2000*l.*, and estimating what remained of the section at 2000*l.* more, it would be seen that for what cost them but 100*l.* would realise altogether about 4000*l.* The land was about a mile and a half east of Adelaide.

The Rev. Mr. TIMPSON inquired at what price the herds were estimated in the last report?

The CHAIRMAN did not know if there was any great difference this time.

The SECRETARY said it was 2*l.* 10s. for some, and 3*l.* for others.

The Rev. Mr. TIMPSON observed, that when he heard of the sale of their cattle, he expected a far greater loss. He hoped the directors would sooner or later dispose of their flocks likewise.

Mr. DIVETT, M.P. (a director), said, the annual production of cattle was enormous; and when he heard they fetched only the boiling down price, and that the greatest facilities were given for driving these cattle to South Australia, he saw the prudence of disposing of them, for he was sure that no number of mouths sent to the colony could raise their value to such a price as would make it advisable for the company to carry on this department. His opinion was, that, looking to the land alone, in two or three years' time they would have considerably more rent from their property, at least a return of 6 per cent. might be expected on the capital expended.

The report having been adopted unanimously, B. W. Currie, Esq., was elected a director in the place of G. F. Angas, Esq., resigned.

Mr. CURRIE returned thanks.

The Rev. Mr. TIMPSON wished to inquire whether the services of their friend, Mr. Angas, who was about to proceed to the colony, might not be made available to the company. It would be very gratifying to him to know if this subject had engaged the attention of the board, from Mr. Angas's great devotion to the interests of the colony.—The CHAIRMAN said, the directors would be happy to communicate with Mr. Angas in any way that was likely to benefit the colony.

Mr. ANGAS alluded to the benefit that would arise from getting their copper ores smelted in the colony, by which they would save three fourths of the freight home, because it would require 4 tons of ore to produce 1 ton of best copper; it therefore followed, that if every ton of copper cost 4*l.*, the freight would come to 16*l.* to pay for this copper. Now, if smelted in the colony, all that could be saved, and would be a means of revenue to the colony. By the new system of smelting, they could at once save a very large portion of fuel; he believed that 7 tons of coal would do the work of 24 tons, and he had also ascertained that one-half coal, and one-half wood, would answer all purposes; if so, the object of the experiments in the colony would be accomplished. There was, therefore, great hopes that all their mineral property there would be turned to good account. He thought the directors would do well to turn their attention to leasing these minerals to certain companies, and he believed they had already agreed with one, but he was afraid, that from the very high rate, the parties would not be induced to try the experiment.

Mr. DIVETT, M.P., said, that in opening the ground, the directors were only desirous of ascertaining what the tenants ought to pay. He never heard that the parties could not afford to pay the royalty proposed; the only question was, whether there might not be required too great an outlay. They could not expect to make the mine productive without an outlay of capital. He hoped this smelting experiment would succeed in the colony, for great success had attended the new process of smelting here. It had been found in this country, that the old process of smelting never answered where they took the coal to the ore, but it did where they took the ore to the coal; up to this time, with one exception, it never succeeded. Now, unless coal could be found in Australia, he did not see the probability of success. The geological nature of the country gave him reason to believe that coal would not be found within the region of the mines.—Mr. ANGAS said, if they could not smelt, they could at least reduce the ore to a high regulus. At Newcastle, near Sydney, there was good coal, and at such a price as would enable them to smelt to a considerable advantage in the colony.—Mr. DIVETT, M.P., said it was well known that certain ores could not be smelted, and some could not be converted into regulus, by the system acted upon universally; it depended upon the nature of the ore. There was a gentleman in the room, however, who knew as well as any man about the subject of smelting, and he dare say he would be happy to give any information to the meeting.

The CHAIRMAN said, the business of the day was concluded.

A vote of thanks was then passed to the chairman and directors of the company. The chairman having withdrawn, the meeting was dissolved.

Mr. DIVETT, M.P., observed, that Mr. Sharp had waited upon him some time since in reference to the copper duties, since when he heard he was actually engaged in the formation of a new smelting company.

Mr. SHARP said, he had been much engaged on the subject of smelting. He would just refer to the Government proposal for removing the copper duties on foreign ore, on which occasion he urged the necessity of protecting those of the British colonies, as their interest would be much affected by the proposition. It had always been his opinion, that whenever measures were introduced in respect to protection, or free-trade, they were bound to regard our colonial possessions as part and parcel of the British empire. Much information had lately come into his possession, which had led him to the conclusion, that the smelting trade of this country was open to some extensive addition and improvement. If in the colony they could not produce perfect copper, they might at least, obtain regulus, and greatly diminish the expense of passing the ore over to this country, and its operation would, no doubt, be so extended, as to justify the formation of a new company to avail itself of any new process, respecting which he should be happy to give any detailed information. Such a company, in his opinion, held out greater advantages than any other branch of industry in the British dominions. As to the smelting in South Australia, he thought it likely to succeed. It was stated that we must not bring the coal to the ore, but take the ore to the coal. Now, suppose this should not be found there, he had no doubt they would still devise means to convert the ore into a state of regulus; but he thought it was likely to be found there, or in some of the neighbouring islands, and, if not sufficient, would, no doubt, be found in the colony to lessen the charge of bringing the ore over to this country. Suppose they converted it to a regulus of 60 or 70 per cent., they would at once diminish two-thirds of the expense; for, taking the ore at a produce of 25 per cent., and the expense of conveying it to the port at 8*l.* per ton, they would have to pay 12*l.* per ton of copper to bring it to the place of shipment; and taking the freight at 4*l.* per ton, 16*l.* more is chargeable per ton of copper for delivering in England, of which, in a state of regulus, two-thirds would be saved, minus the expense of so converting the ore.

NORTH BRITISH AUSTRALASIAN COMPANY.

At a preliminary meeting of proprietors, held at the Lemon Tree Tavern, Aberdeen, on Wednesday, the 27th December, about 24 partners attended.

JOHN PARK, Esq. (Fraserburgh), in the chair.

Mr. ANDERSON (Clochcan) stated, that acting for, and with, the Buchan partners, he had called the meeting, to consider the position and prospects of the company.—Several partners stated their belief that, without the reports by the committee of shareholders and the directors, the meeting could come to no resolution.—Messrs. GARDINER and PARK informed the meeting that they had gone to the cashier's office, and had together spent a considerable time in examining these documents; that they were lengthy and complicated, and that they were unable to ascertain, from a single perusal, whether they really accounted for the company's capital or not—Mr. Gardiner giving it as his decided opinion that the capital and profits from general business were not accounted for in the reports.

Mr. ANDERSON then read the following statement of the company's affairs, founded on documents drawn up by the directors:—

Amount of capital, 1841, should be	£53,000
Total amount of debts, per joint report of Messrs. Beattie and Taylor	40,000
Balance of capital, after paying all incumbrances	£13,000
Profits on general business for four years	18,000
Good debts due to us per Taylor's report, £11,000; ditto, per Beattie's report, since fully realised	16,300
Properties left by Beattie, sold by Taylor (say)	3,000
Discount on bonds on St. Clair, for payments before due	2,000
Total	£52,300
Expended on Kaw-aw Mine, £14,755; Bon Accord Mine, £2500 = £17,255. Borrowed on 10th July last, £17,000	255
Leaving to be accounted for on 10th July	£52,045

Mr. ROSS (advocate) stated that, as a member of the committee of enquiry, he was aware that the statement was altogether erroneous, and requested Mr. Anderson to hand him the statement, that he might point out the inaccuracies.—The statement was offered frankly and willingly, but he declined it; and proceeded to remark on the 18,000*l.* set down as profits for four years on general business, denying that these profits amounted to any such sum; and that, as Mr. Taylor had sent home no balance, or valuation, since June, 1847, the statement must be incorrect; and that these profits amount to only two or three thousand pounds during the whole time Mr. Taylor has been manager.—Mr. ANDERSON answered, that he was aware that part of the above sum was only assumed; but that was no fault of his. Mr. Taylor had stated his profits for one year at 6800*l.*; and for another at 5000*l.*; and, considering the prosperous state of the colony, the rapid increase of the sheep, and the profits stated for these two years, he thought the estimate for the remaining two was very moderate at 6200*l.*, or 3100*l.* a year. Mr. Anderson insisted that Mr. Ross, who was on both committees of inquiry, had drawn up both reports, and was necessarily acquainted with the details of the business, should enter further into the statement; but he declined doing so, after denying that the sums of 6800*l.* and 5000*l.* were correctly given.—Mr. BROWN, another member of the committee, stated, however, that these sums were substantially correct.—Mr. NOTMAN, accountant, here made some very judicious remarks on the way in which the accounts were kept; and it appeared that part of these profits were for increased value put on properties in Mr. Taylor's valuations.

Mr. ROSS now read a paragraph from an advertisement in the *Mining Journal*, in which Mr. Anderson was represented as acting for the committee of shareholders, which Mr. Ross persisted in considering the committee of inquiry, and asked Mr. Anderson if he was the author of the paragraph?—Mr. ANDERSON said that he was not.—Mr. Ross then asked if he knew who was the author? and Mr. Anderson declined answering the question, but stated that it was obviously a mistake, and was corrected in the next paper.

The meeting then separated, it being generally agreed that those present should support a motion for printing the reports.

At the general annual meeting, held next day, in the Aberdeen Hotel—JOHN SMITH, Esq., one of the directors, in the chair—the reports by the committee and directors were read, with the exception of the appendix, containing the statement of accounts.

Mr. ANDERSON moved, seconded by Mr. GARDINER, that the roports be received, printed, and circulated among the partners.

The CHAIRMAN moved, seconded by ALEXANDER GORDON, another director, that the reports be received, approved of, and the thanks of the meeting given to the committee.

Mr. ANDERSON agreed to modify his motion, so as to avoid the possibility of his being understood to undervalue the labours of the committee, on the understanding that his motion, thus altered, would be unanimously passed; but it appeared as if the directors, and their friends, intentionally kept the meeting from any useful business; for upwards of three hours they engaged the meeting in discussing as to the authorship of the advertisement and the printing of reports, and latterly got a motion passed, approving, but not to print, the reports. After 12 to 20 shareholders had left—the meeting being thus thinned, and others continuing to leave—it was deemed imprudent to divide as to directors; thus the former directors were continued in office.

After some desultory conversation, during which Mr. Ross characterised the insertion of the advertisement, calling the general meeting in the *Mining Journal*, as dishonest, the meeting divided, when the chairman's amendment was carried by, we believe, 44 to 22. This unfortunate company being thus left as completely as ever in the dark about the state of their affairs. Only four members of the committee of inquiry were present—two voted for each motion. Surely there must be some remedy. Can the partners, all other means having failed, get their affairs judicially examined? What can be the result of a continuance of the business under the present management? In the contract the partners were assured, that under no possible contingency could they be involved beyond their paid-up capital. "That no money should be borrowed, or investments entered into, beyond the amount of the tangible paid-up capital, and means at the time."

The affairs have fallen into the hands of a junto, who are acting in open and direct violation of this fundamental and salutary enactment, obstinately refusing to publish any information among the shareholders. Verily there must be something rotten in the state of the affairs; no man, no body of men, can have any good reason for acting thus. Let the truth be known, without reserve, and it will cover a multitude of sins. This is no private matter; many simple confiding parties have embarked their means on the assurance that the contract would be adhered to.

The Editor of the *Times* has ably and honourably done his duty in railway affairs. We have much need of his aid here, to enable us to lay bare the system under which the capital of this town and county has been squandered by the American and Australasian companies, to the extent of nearly 500,000*l.* sterling—no local paper ever noticing the subject.

The report by the committee did not lie for nearly 14 days in the cashier's office before the meeting. Many of the partners have never seen it; those who have, cannot be expected to understand it. The appendix, containing the statement of accounts, was not even read to the meeting—a proceeding very much resembling the omission of the part of *Hamlet* from the play of that name. The committee spent nearly six months on this report; they were appointed because the partners were entirely ignorant of their own affairs. If it is of any use in showing how matters really stand, it should be put in the hands of the partners. The other Australian company gives publicity to its affairs; they feel no evil effects from doing so; and get their principal business in lending money. We have few, if any, debtors. It is no breach of charity to assert, that the only reason why the cashiers and directors of this company persist in refusing all information is, that such information would confirm the charge of mismanagement. Their management is an improvement on hon est Fergus O'Connor's celebrated "land scheme."

NEW PATENTS.

W. G. Wilson, Port Dundas, Glasgow, engineer, for improvements in the formation of moulds and cores of moulds for casting iron and other substances.

W. Knapton, York, ironfounder, for certain improvements in the mode of manufacturing gasometers or gasholders.

W. Thomas, Cheapside, London, merchant, for improvements in the manufacture of window blinds. (Being a communication.)

D. Y. Stewart, Montrose, Scotland, ironfounder, for improvements in the manufacture of moulds and cores for casting iron and other substances.

H. Francis, Chelsea, Middlesex, engineer, for improvements in sawing and cutting wood.

R. Munn, Stack Head Mill, near Rochdale, Lancaster cotton spinner, for certain improvements in looms and apparatus connected with looms for weaving various descriptions of textile fabrics.

W. C. Most, Upper Berkeley-street, Middlesex, surgeon, for improvements in engines to be worked by steam, air, or gas.

DESIGNS FOR ARTICLES OF UTILITY REGISTERED.

G. Forester and Co., Liverpool, hydrant, or slide valve, for water pipes, fire hose, and and other purposes.

Towns and Packer, Oxford-street, improvements in the action of pianofortes.

J. Singer, Princes-street, Leicester-square, the portable wrapper vest.

I. Moses (trading under the firm of E. Moses and Son), Minories, duplex waistcoat.

C. C. Williams, Railway Carriage Works, Goswell-street, balance-frames for door glasses, or shutters for railway and common road carriages.

J. Greenwood, jun., Mold Green, Huddersfield, rack and pinion shuttle.

J. Bryce, Glasgow, hydrostatic pressure regulator.—*Mechanics' Magazine.*

The Compendium of British Mining.

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REVISED, CORRECTED, AND ENLARGED FOR THE "MINING JOURNAL,"
BY J. Y. WATSON, ESQ., F.G.S.

EASTERN DISTRICT.

WHEAL TRELAWNY SILVER-LEAD MINE, in the parish of Menheniotte, near Liskeard, Cornwall. Conducted on the Cost-book System. In 260 shares, 7*l.* 10s. per share paid up; present market value, 70*l.* Purser and manager, Capt. John Bryant, of Liskeard. The sett in extent is 400 fms. on the course of the lode, and held on lease for 21 years (16 years unexpired), at 1-12th dues, the lords being Charles Trelawny, I. Carthew, and J. Toby, Esqs., and Dr. Honey, and who have consented to take 1-15th dues for the last 2½ years. The first returns from this mine were made in April, 1844, and from that time to the end of October, 1848, the quantity sold has been 2658 tons, yielding in money 41,149*l.* 8s. 2d., being an average of 15*l.* 10s. 6d. per ton. Up to 1846, 3120*l.* profit were divided among the shareholders, when an addition to the sett was made by the purchase of a field of Dr. Honey for 1200*l.*, and new machinery erected, at a cost of at least 2000*l.* more. These amounts having been paid from the returns, no dividends have been declared for two years, and, consequently, shares receded in price from 150*l.* to 50*l.*, but have lately rallied to 70*l.*, at the prospect of a dividend (2*l.* 10s. per share), which it is said will be declared at the meeting to be held the latter part of this month. The above returns have been made from the south mine, but to the north of Trehane a considerable run of ore ground has been laid open, and from which good returns may be anticipated, and it is hoped of richer quality for silver; another steam-engine, however, will be required for this part of the sett. The machinery at present consists of two draught steam-engines, one of 22-inch cylinder, the other of 50-inch; also a steam-whim of 22-inch cylinder, with crushing and stamping machines attached to a water wheel. Phillips's shaft, which is the deepest, has been sunk to a 72 fm. level; Trelawny's shaft to the 60, but no level driven under the 52. In the north mine a 30 fm. level has been driven about 100 fathoms through an orey lode, and two whim-shafts have been sunk to this level. The present returns are about 100 tons per month, at a cost of rather more than 1200*l.* The last sale (103 tons) realised 17*l.* 3s. 6d. per ton. About 360 persons are employed on the mine underground and at surface. It may be added, the accounts are made up, and audited every two months, at a meeting of shareholders at Liskeard, and which is generally attended by one or more of the largest proprietors in London—a system which adds considerably to the confidence of the out-adventurers, or those residing at a distance.

WHEAL MARY ANN.—A silver-lead mine adjoining Wheal Trelawny to the south, conducted on the Cost-book System; in 512 shares, 5*l.* 5s. paid — market value, 14*l.* Purser and manager, Peter Clymo, jun., Liskeard. The sett, which in extent is much larger than Trelawny, is held on lease for 21 years, of which 17 are unexpired, at 1-12th dues. The surface owner is Miss Pollard, who, in addition to the dues, is to receive 1000*l.* in money out of the first profits. At the commencement of the works a shaft (Pollard's) was sunk close to the boundary of Trelawny, where the lode was cut at a depth of 5 fms. Another shaft, Barrett's, was commenced on a hill further south, and upon which a steam-engine, of 46 and 25-inch cylinders combined, has been erected. This shaft is 40 fms. deep, and levels have been driven both north and south, opening a considerable quantity of ore ground. To the end of November, 1848, the returns have been 557 tons 2 cwts. 1 qr., yielding in money, 9330*l.* 7s. 7d. The present yield is about 30 tons per month, which meets the cost. The persons employed are 125. The two-monthly meetings are held at Liskeard, generally the day after the Trelawny meeting.

SOUTH TRELAWNY is to the south of Mary Ann, and about one mile from Trelawny. The sett is very large, and an enormous premium paid for it. Conducted on the Cost-book System, in 256 shares; upwards of 20*l.* per share paid up, and price 3*l.* Temporary purser, Capt. W. Lean; agent, Capt. Jenkin; London secretary, Mr. T. Hacket, 26, Birchin-lane. The mine is held on lease for 21 years, of which 17 are unexpired, at 1-15th dues, of Mr. Rabey. Considering the time occupied, very little has been done in the mine, and that little to no profitable result. A small engine was erected, and a shaft sunk to 30 fms., at which depth the lode was cut about two months since, but poor, and a level is now being driven upon it north and south; and, unless it improves before long, operations, it is presumed, will be suspended.

[*To be continued in next week's Mining Journal.*]

Mining Correspondence.

ENGLISH MINES.

ASHBURTON UNITED.—Mr. A. Murray having visited these mines (Dec. 30) reports.—It is with great pleasure I found Capt. Kernick almost convalescent from the injuries he had sustained by his fall, of 7 or 8 fms.: much credit is due to our medical adviser, Mr. Bean, and to the voluntary and kind assistance of Mr. Palk, for so speedy a recovery. I found the mine in the following condition:—The north lode, which has been of late mentioned in the weekly reports of Capt. Kernick, is opened in six places—one in the 55 fm. level, three in the 45 fm. level at Hobsons, and two in the 35 fm. level at Parry's shaft, holding in each place an equality of dimensions—about 3 ft. wide—and maintaining, in most of the pitches set at this point, its value, averaging 2½ to 3 cwts. of black tin to the ton of stuff, and producing a quality of metal equal to 14¾ in 20; this newly discovered lode varies a few degrees from the parallel of the other south lodes near it, forming a junction with them westwardly, and in its underlie will form a junction with them a few fathoms below our present shafts—having a south underlie, whilst all the south lodes have a north underlie. We believe there may be a series of these north lodes, equal in number to the south lodes, yet undiscovered. The south lodes, which have been very much explored to a certain depth, and from which great quantities of tin have been raised, have still many points left above the 55 fm. level, and from the pitches set on these points we may reasonably expect favourable results; but our great expectation on these lodes is in depth at their junctions with the north lode, and any series of them that may occur. We have 4 pitches set on the south lodes, employing 18 men at rather a high tribute at present, but after another month we expect them to set at a much lower price. The most westerly pitch is Caunter's, in the back of the adit; it has just been opened for a heave of the lode, after two or three months cross-cutting and rising; it contains a lode equal to 10 cwts. to the fathom. The other pitches are in the backs of the 25 fm. level, 35 fm. level, and 45 fm. level, east of Murray's shaft; the latter one is most promising, and is likely to open a valuable extent of ground in this part of the mine—at present it averages nearly 1 cwt. of tin per ton of stuff. The pitches on the north lode employ 36 tributes, 18 of whom are getting high wages for the remainder of their tin, and the remaining 18 have retaken lately at low tribute—they are divided as follows: six men at Hobsons 55 fm. level, 28 men at the 45 fm. level, and two men at the 35 fm. level at Parry's, all in excellent ground; in reviewing these pitches altogether, we may safely contemplate being in a position to cover our cost, and shortly to return a handsome remuneration for our exertions. The copper lode, recently discovered some distance south of Hobson's shaft, contains 36 per cent of copper, and is 6 to 8 inches wide, of grey ore; we are unable at present to prosecute it advantageously, and, therefore, propose to wait until the spring to sink a shaft on it, as from its distance it may be called a new mine. Our stamping power is so fully employed, that we have commenced to put up one extra iron wheel, in a position to add 12 to 18 heads more, which arrangement will be complete in one month, at a moderate cost, and, no doubt, will be immediately called into requisition; our pumping power for our great wheel is in good condition, and will, no doubt, carry us 30 or 40 fathom deeper, so as fully to explore the junction of the north and south lodes, when we commence sinking.

AYLESBOROUGH.—Captain John Spargo (Jan. 4) reports—The shaftmen are making preparations to commence sinking under the 10 fm. level. The ground in the south cross-cut is favourable for driving, being a soft decomposed granite; we hope to cut the lode in a few days. We have driven on a large branch a few feet to the north of the shaft, which is very rich for tin; we expect in a few feet sinking this branch will be intersected by the shaft, and if it continues, will far more than pay the cost of sinking the shaft. We sold upwards of 50*l.* worth of tin last month, and hope to sample just the same quantity this month. We expect our next sample of tin will exceed the last, which brought 51*l.* per ton. There is every reason to expect this mine to amply reward the adventurers for their outlay, after we have sunk a sufficient depth to drive on the lodes, and get backs. We have only just cleaned up the mine, and are now beginning to open new ground. Our six heads of stamps work well, and after we cut the main lode, we expect we shall be obliged to erect others.

BARRISTOWN.—Capt. T. Angove (December 29) reports—We have intersected a slide in the 15 fm. level end east, which has heaved the lode, consequently we have no lode in this end at present; the back of this level, for several fathoms behind this end, is now being opened on tribute, and the lode can be taken away at 4*l.* per ton. In the adit end east the lode is large, but producing little ore, from 3 to 5 cwts. per fm.; the winze, sinking in the bottom of the adit level, about 12 fms. east of present 16 fm. level end, is producing about 15 cwts. of lead per fathom. We have been greatly obstructed in our underground work of late for want of better ventilation, however, the eastern adit shaft is now holed, which will remedy this. The *Francis Mary*, which was to take the cargo of lead, has been wrecked on her passage here—we are now in treaty for another vessel.

BEDFORD UNITED.—Capt. J. Phillips (Jan. 3) reports—At Wheal Marquis, the engine-shaft is about 13 fms. 2 ft. under the 90 fm. level; in the 90 and 80 fm. levels east there has been no lode taken down, the capels continuing hard and strong. The lode in the 70 fm. level is 18 in. wide, producing stones of ore. We weighed, at Morwelham, on Tuesday last, October ores 102 tons 10 cwts. 2 qrs., and sampled November ores computed 114 tons (21 cwts).

CARTHEW CONSOLS.—Capt. W. H. F. Stephens (Dec. 30) reports—The sumpmen have not yet got to the 18 fm. level, having had, in the past week, to encounter much difficulty in clearing the shaft, consequent on the here unprecedented plenitude of water falling down it from the late very heavy rains, and the lode having been worked away in either end of the same, thereby giving the adjacent ground great tendency to coming in. We have resumed clearing the adit level south (old mine), for the purpose of intersecting the east and west copper lode. In the valley 10 fm. level end south the lode is without alteration. The lode in the adit end is very large, and of promise unparalleled here, but not rich.

COMBLAWN.—Capt. James Hosking (Jan. 3) reports—In the 20 fm. level the lode is 18 in. wide, composed of soft spar, prian, peach, iron pyrites, blende, and silver-lead ore, saving work. There is nearly all the water that the engine has to draw coming from this level, and the ground being a tough clay slate, with branches of spar and mundic crossing it in different directions, greatly retards our progress in driving; however, we expect shortly to see a change for the better, as nearly all the water formerly coming from the elvan course is now let down, and, as soon as a communication is made from the 15 to the 20 fm. level, the workings will be ventilated, and the driving greatly facilitated. The end on the lode, west of cross-course, is driven nearly 5 fms. The sinking a winze from the 15 to the 20 fm. level will, in all probability, augment our monthly cost about 8*l.* 10*s.* per month for two months.

DEVON AND COURTENAY.—Capt. N. Seccombe (Jan. 2) reports—In the end driving west, on the gossan lode, in the 40 fm. level, we have driven through the cross-course mentioned in my last report, the lode to the west of which is about 18 in. wide, composed principally of mundic and peach. The ground in the cross-cut south continues rather hard. In the end driving east, on the south lode, in the 50 fm. level, the men have not taken down the lode, as they are driving by the side of it.

EAST CROWNDALE.—Capt. S. Paull (Dec. 30) reports—Both the cross-cuts, north and south from Diamond's shaft, are suspended, and six men put to sink Diamond's shaft. The adit level, on the course of Thomas's lode, is improved in the past week, and, from the general character of the lode, I expect a further improvement; the lode continues to its usual size, and will, for six weeks, on its length or course, produce about 35*l.* per fm.; the stopes in the back of this level are without much alteration since last reported upon—a large lode 16 ft. wide, with tin disseminated throughout, worth about 20*l.* per fm. Everything with regard to our dressing department goes on to my entire satisfaction, and, when a burning-house is erected, we shall go regularly to the market with tin.

EAST TAMAR CONSOLS.—Capt. James Wolferstan (Jan. 1) reports—I beg to hand you a statements of the settings for January, to which I shall add some remarks, so as to form a monthly report. The shaft is sunk about 5 ft. below the bottom of the 70 fm. level, and ground cut for tramroad; there was no fresh setting, as the men have not completed their bargain; a great alteration has taken place in the lode in the bottom of the shaft; it is now about 5 ft. wide, much easier for sinking, with a very good branch of lead in the north end of it. The water is boiling up from the deepest point, and there is every prospect of the lodes continuing to improve. The north end, in the 70 fathom level, was set to four men 4 fms. stent, at 3*l.* 15*s.* per fm.; the lode in this end is large, composed of can and horn-spar, and although very promising, is still unproductive; the south end, in the same level, was set to four men 4 fathoms stent at 2*l.* 15*s.* per fm.; the lode in this end is about 3½ feet wide, composed principally of can, with a branch of mundic and jack, and a good leader of lead; near the western wall the last 5 fms. or 6 fms. driving has opened good tribute ground. The north end, in the 60 fm. level, was set to four men 2 fathoms stent, at 3*l.* 5*s.* per fathom, and 5*s.* in the 1*l.* tribute; the lode in this end is much improved, and will now yield 9 cwts. of lead per fathom of ground. The south end, in the same level, was set to four men, 2 fms. stent, at 3*l.* 5*s.* per fm., and 5*s.* in 1*l.* tribute; the lode in this end is much improved, and will now yield 9 cwts. of lead per fm.; the south end, in the same level, was set to four men, 2 fms. stent, at 5*l.* 10*s.* per fm., and 5*s.* tribute; the lode at this point is become hard, and less productive; but still leaving good tribute ground. The north end, in the 46 fm. level, was set to four men, 2 fms. stent, at 3*l.* 10*s.* per fm., and 5*s.* tribute; the lode in this end is large, more kindly and productive than it was, and will now yield 6 cwts. of lead per fm.; the south end, in the same level, was set to four men, 1 fm. stent, at 4*l.* 10*s.* per fm., and 5*s.* tribute; the present end is principally in the country—the lode having made a warp to the westward; but we expect to get fairly into it again in the course of the next week. The pitches set were as follows:—In the back of the 60 north, by six men, at 10*s.* in 1*l.*; ditto south, by eight men, at 9*s.* 6*d.* in 1*l.* In the back of the 54 north, by four men, at 10*s.* in 1*l.* In the back of the 46 fm. level, by two men, at 11*s.* in 1*l.* In the back of the 25 fm. level, by two men and two boys, at 11*s.* in 1*l.*; ditto, by four men, at 11*s.* in 1*l.*; ditto, by two men, at 12*s.* in 1*l.* In the back of the 11, south of Charlotte's, by four men, at 10*s.* 6*d.* in 1*l.* One in the back of the 46, for four men, one in the bottom of the 38, for four men, and one south of Charlotte's shaft, for four men, were not taken, but I expect to set them in the course of a day or two. The pitches generally throughout the mine are working better, and I believe the men are likely to do very well.

HOLMBUSH.—Capt. William Lean (Jan. 3) reports.—The ground in cutting through the cross-course, west of the diagonal shaft, in the 132 fm. level, is still very hard; the ground in the north cross-cut, in this level, is favourable, but to the present time we have discovered no branch. Since we have made the communication to the winze in the 120 fm. level, east of Hitchins's shaft, we have been clearing the rubbish, &c., from it, and find the ends of it orey, which we think will set on Friday at 8*s.* in 1*l.* tribute; the lode in the 120 fm. level south is 3 ft. wide, composed of can and stones of lead—ground more favorable for exploring than it has been. The lode in the 110 fm. level south is four feet wide, composed of quartz, with stones and strings of lead in it; the lode in the rise, in the back of this level, which we are trying to hole to a winze that is sunk 5 fms. below the 100, is hard, and at present poor. The 100 fm. level east, on the flap jack lode, is extended 44 fms., and no cross-course visible; the lode is 2 ft. wide, composed of mundic, spar, and spots of copper, and the ground never so favorable as at present; it must have made a very great angle at this place, when compared to other points, where it intersected.

KINGSETT AND BEDFORD.—Captain John Spargo (Jan. 4) reports—The men are engaged in securing the deep adit to the south of Carpenter's shaft; when completed (which will be in a few days) we intend to drive on the lode, near the greens, which I believe to be of the greatest importance in this part of the sett; the adit is driven through very soft clay slate, by reason of a slide, or something to that effect. In examining the ground in the side of the adit, we discovered a lode with well-defined walls, and a branch of lead about 2 in. wide, solid, which, of course, will more than pay for driving. We cannot as yet take its bearing, as there is not more than a foot driven by it; the water here is 4 feet deep, which prevented us from doing anything on it; this lode is within 10 feet to the corrode of greens produced by the strong mineralised water proceeding from something of importance before us. We have also a pare of men rising in the back of the deep adit further north, and are breaking some very rich work for lead.

KIRKCUDBRIGHTSHIRE.—The agent (December 30) reports—The lode in the 50 end, east of Stewart's, is 3 ft. wide, composed of spar and carbonate of lime, spotted with lead. The lode in the 30 east is still in black ground; the lode in the winze, in the bottom of this level, is 2 ft. wide, containing jack and a little lead. The lode in the 20 east is large, but not productive. We have shipped another cargo of lead this week.

LEWIS.—Capt. S. S. Noell (Dec. 35) reports—The lode in the 70 east is 2 ft. wide, saving work for tin; the lode in the 70 west, on the south branch, is small and unproductive. The lode in the 60 east, on the south branch, is 2 feet wide, worth 10*l.* per fm.; in the 60 west, on the south branch, the lode is 18 in. wide, worth 8*l.* per fm.—much improved since my last. The lode in the 50 east, on the south branch, is 2 ft. wide, worth 8*l.* per fm.; the lode in the 50 east, on Rolph's branch, is 1 ft. wide, yielding some good work for tin. The lode in the 40 east, on the south branch, is 9 in. wide, producing some good quality tinstuff; in the same level west, on the south branch, the lode is 10 in. wide, driving at 12*s.* tribute; the lode in the 40 east is 18 in. wide, producing some good work for tin. The lode in the 30 west, on the south branch, is 18 in. wide, worth 3*l.* per fm. for tin.

LOSTWITHIEL CONSOLS.—Capt. John Eusaice (Dec. 30) reports—We are now in very easy ground, and already 15 fms. on the branch towards the caunter lode, and only about 15 fms. more to drive—8 fms. per month. We shall see the caunter under the rich gossan in due time.

MENDIP HILLS.—Capt. F. C. Harpur (Jan. 1) reports—The appearance of the lode in the winze, sinking below the 20 fm. level, north of Somers' shaft continues without the least alteration whatever, being composed of white spar, flookan, and iron, intermixed with some stones of good quality lead at times. In the slag department we have several tons of good quality slags prepared for the furnaces; I intend to commence smelting it to-morrow morning. In the slag ground we continue to lay open the cutting towards the eastern part of the valley, where we find the beds of slag stuff about 15 ft. thick, producing some good work for slags, and a quantity of slimes.

SOUTH WHEAL TRELAWNY.—Capt. W. Lean (December 30) reports—The lode in the 30 fm. level, north of the shaft, is more compact than it has been, and we hope we are nearly through the elvan course; one part of the lode, on the eastern side, is 10 in. wide, composed of barytes, spar, mundic, and cubes of lead; in driving south, in this level, we have intersected an east and west branch, 12 in. wide, composed of flookan, spar, and a great quantity of fine grain mundic, which have disordered the lode, and we have thought it prudent to suspend it for the present, and resume the driving of the 30 fm. level north, on the spar branch, which is letting down a pretty deal of water, and the ground favourable for exploring, being sett for 30*s.* per fm.; it is composed of barytes, spar, mundic, and sprigs of lead.

TAMAR SILVER-LEAD.—Captain James Sprague (Jan. 1) reports—The engine-shaft is sunk to the 190 fm. level; we have commenced driving this level, in which we find the level to be 15 inches wide, with good stones of ore. The 175 end is in unproductive ground, and at present poor. In the 160 end the lode is 18 in. wide, composed of capel and ore, saving work. In the 140 end the lode is very much improved within the last two or three days, the lode about 20 in. wide, 9 in. of which being very good work. In the 135 end the lode is 2½ ft. wide, composed of capel, can, and ore, rich work. At North Tamar, in the 80 fm. level the cross-cut is driven west 3 fms. 4 ft. 6 in., the ground still continues hard for driving. In the 70 end the lode is 4 ft. wide, chiefly composed of elvan and can. In the tribute pitches, at this mine, the tributers carry all the branches, in which we find the gunnis of the lode to be 4 fms. in width, and which carries lead throughout. We hope to sample on Saturday, the 6th inst., about 85 tons of rich silver-lead ores.

TINCROFT.—Capt. Peter Floyd (January 1) reports—At Palmer's, in the 80 fm. level, west on East Pool lode, the lode is worth 7*l.* per fm. for copper. The 70 fm. level west is worth 3*l.* per fm. for copper. At North Tincroft, the lode in the 100 fm. level east is worth 8*l.* per fm. for copper; the 100 fm. level west is worth 9*l.* per fm. for copper. The 90 fm. level east is worth 12*l.* per fm. for copper; the 90 fm. level west is worth 25*l.* per fm. for copper. The 80 fm. level, east of Willoughby's shaft, is worth 8*l.* per fathom for tin; in the winze, sinking below this level, the lode is worth 9*l.* per fm. for tin and copper; in the winze, sinking west of engine-shaft, in the bottom of this level, the lode is worth 9*l.* per fm. for copper. On Highburrow lode, in the 152 fm. level, east of engine-shaft, the lode is worth 6*l.* per fm. for tin; in the back of the 142 fm. level the stopes are worth 10*l.* per fm. for tin; in the 142 fm. level, east of Martin's east shaft, the lode is worth 10*l.* per fm. for tin; the stopes in the back of the 142 fm. level east are worth 20*l.* per fm. for tin; the stopes west, in the back of this level, are worth 26*l.* per fathom for tin. The 132 fm. level east is worth 18*l.* per fm. for tin; the 132 fm. level west is worth 20*l.* per fm. for tin; the stopes in the back of the 132 fm. level are worth 18*l.* per fm. for tin. The stopes in the back of the 120 fm. level are worth 10*l.* per fm. for tin. On Chapple's lode, in the 100 fm. level, west of downright shaft, the lode is 3 ft. wide, with good stones of copper ore. In the 90 fm. level west the lode is worth 9*l.* per fm. for tin and copper. The 80 fm. level west is worth 6*l.* per fm. for tin. Blight's shaft, on Dunkin's lode, sinking below the 84 fm. level, is disordered at present. In the 84 fm. level east, on south lode, the lode is 3 ft. wide, with stones of copper ore. Chapple's shaft, sinking below the 72 fm. level, on south lode, is worth 7*l.* per fm. for copper.

TIN VALE.—Capt. J. Hosking (Dec. 30) reports—We have driven west on the middle lode, (this month) 5 fms. 1 ft.; the lode is 3 ft. wide, producing some tin; the branches are still yielding some saving work. We are driving north of pitch, west of cross-cut, with a view of intersecting the north branch in Rose's adit, and opening more orey ground. We have set the eastern end, on the middle lode, to drive by two men, at 25*s.* per fm., and 8*s.* in 1*l.* tribute. The Standfire stream-works are making remunerative returns.

TREHANE.—Captain S. Richards (Jan. 1) reports—Kelly's shaft is down 6 fms. below the 55 fm. level, and the ground continues favourable for sinking; in this level north the lode is 2½ feet wide, worth 9 cwts. of lead per fm.; the stopes in the back of this level, both north and south, are worth, on an average, about 8 cwts. of lead per fm.; the south end, in this level, is holed to Trelawny Mine, and the men who were employed in driving the end, will now commence stoping the back near the boundary. The lode in the 45 fm. level north is 2 ft. wide, composed of capel, can, and spar, with good stones of lead occasionally; the lode in the stopes, in the back of this level (north), is producing 8 cwts. of lead per fm.; we are sinking a winze in the bottom of this level, for ventilating the level below, and advantage for stoping the back, the lode in which is worth 7 cwts. of lead per fm.; in the stopes, in the back of the 45 south and bottom of 30 north, the lode is without any important alteration, worth about 6 cwts. of lead per fm. I cannot speak of any change in the cross-cut driving west in the 30 fm. level.

TRELEIGH CONSOLS.—Captain W. Symons (Dec. 29) reports—In the 113 fm. level, east of Garden's, the lode is 2½ ft. wide, with a kindly appearance, but very little ore; in the 113 fm. level, west of ditto, the lode is 4½ ft. wide, of a strong promising character, with spar, capel, and mundic, with but little mineral. In the 100, west of Garden's, the lode is 14 inches wide, orey, saving work. Neither of the above levels could be measured, the water, being in plunger, having failed. In the 90, east of east cross-cut, the lode is 20 in. wide, worth 4*l.* per fm.; in the winze below the 90, east of ditto, the lode is 3 ft. wide, no ore to value; about 3 fathoms more to hole to the 100 fm. level. In the 70 west of Garden's, the lode is 2 ft. wide, rather more promising than usual, but no ore to value; in the winze, below the 70 west of ditto, we are driving north from the rise in the 30 to hole to this winze, they being on two separate parts of the lode. In the 60, west of Garden's, the lode is 2 ft. wide, worth 3*l.* per fm. The 50, west of ditto, is suspended; those men are in the 60 fm. level. The cross-cut south to the lode, at Wheal Parent, is to cut the lode, which we calculate we have about 4 fms. more to drive. In the adit east, on the middle lode, the lode is 8 in. wide; it contains spar, mundic, and jack.

WEST WHEAL JEWEL.—Captian T. Bray (Jan. 1) reports—The 70 fm. level, west of Williams's cross-course, on Wheal Jewel lode, is unproductive. In the 57 fm. level, west of ditto, on the same lode, lode not taken down in the past week, in the 57 fm. level east, on the same lode, the lode is unproductive. In the 57 fm. level, west of Williams's cross-course, on the same lode, the lode is 1½ feet wide, producing stones of ore; in the deep adit, west of Hodges's cross-course, on the same lode, the lode is producing stones of ore; in the rise in the 57 fm. level, west of Williams's cross-course, on the same lode, lode not taken down in the past week. In the 30 fm. level, west of Quarry shaft, on Tolcarne tin lode, the lode is 2 ft. wide, producing stones of tin; in the deep adit, west of Quarry shaft, on the same lode, lode not taken down in the past week. In the stopes, east of Pryor's winze, on the same lode, in the back of the 12 fm. level, the lode is worth 9*l.* per fm.; the stopes west of ditto are worth 20*l.* per fm.; the stopes in the bottom of the 12 fm. level, on the same lode, are worth 18*l.* per fm.

WHEAL BARBARA.—Capt. W. H. F. Stephens (Dec. 30) reports—We are prosecuting the cross-cut north, to cut the north lode, by six men, with all speed; and are continuing the east end, by two men, where I find no alteration in the lode.

WHEAL PENHALE.—Captain W. H. F. Stephens (Dec. 30) reports—The lode in the 10 fm. level south is looking very well, producing good work, and from 5 to 6 ft. wide; in the same level north but little has been done this week, having had to engage the men on sundry other work; the sumpmen have commenced stripping down the lode they have resumed, and I find it to be very large, producing good work; we have commenced to drive north from the winze, where there is a very good lode; in the adit end the lode is disordered, but our appearances here altogether are much improved since my last.

WHEAL SARAH.—Captain John Spargo (Jan. 4) reports—In my last, I stated that we had set the south end to drive in the 20 fm. level, and that we were daily expecting improvement, as the branches connected thereto were very rich, and falling into the lode. I am happy to inform you, that the lode at present is worth 10*l.* per fm. for lead, and appears to be very rich for silver. The stopes in the bottom of the 16 fm. level are just as last reported, worth about 8*l.* per fm. The tributers in the back of the 20 fathom level are making wages, as well as those in the back of the 16 fm. level.

WHEAL TRELAWNY.—Capt. John Bryant (Jan. 2) reports—The lode in the 72 end, north of Phillips's shaft, is 2½ ft. wide, and worth 9*l.* per fm.; in the end south, in this level, the lode is 18 in. wide, and worth 7*l.* per fm. The lode in the 62 end, north of this shaft, is 4 ft. wide, and worth 12*l.* per fm.; the lode in the south end of this level is 2 ft. wide, composed of can and lead, and worth 4*l.* per fm.; the stopes in the back of this level are, on the whole, producing a moderate quantity of ore; but the ground is still hard. We have just commenced sinking a winze in the bottom of this level, about 8 fms. north of Phillips's shaft, and shall be able to put a value on the lode next week; the ground in Trelawny's shaft is still hard. The lode in the 52 fm. level, north of this shaft, is 3 ft. wide, composed of can and lead, worth 7*l.* per fm.; the stopes in the back of this level, and in the 42 fm. level, are without any material change since my last; the tributers in this part of the mine are working spiritedly, and earning fair wages. At the north mine, the lode in the 30 end, north of Smith's shaft, is 2 ft. wide, composed of spar, can, and lead, worth 4*l.* per fm.; the pitches in the back of this level, to the south of the shaft, are not altogether looking so well as they have been. The parcel of ores, computed 103 tons, was sold on Wednesday last to Thomas Somers, Esq., at 17*l.* 3*s.* 6*d.* per ton.

WHEAL MARY ANN.—Capt. Peter Clymo, jun. (Jan. 1) reports—The lode in the rise in the 50 fm. level, south of the boundary, under Barratt's shaft, is 2 ft. wide, worth 7*l.* per fm.; the rise is now 8 ft. above the level. The lode in Barratt's shaft, under the 40 fm. level, is 2 ft. wide, and worth 8*l.* per fm.; the lode in the 40 fm. level, south of Barratt's shaft, is 4 ft. wide, and worth 9*l.* per fm. The stopes in the back of this level are producing a fair quantity of lead. The alteration of the pitwork in Pollard's having been completed, we have resumed the sinking of this shaft under the 40 fm. level. The lode in the 40, north of Pollard's shaft, is 1½ ft. wide, and worth 6*l.* per fm.; in the same level south the lode is 1 ft. wide, composed of can, mundic, barytes, and lead. The lode in the 30 fm. level south is 5 ft. wide, and worth 8*l.* per fm. The lode in the 15 fm. level south is very similar to my last report.

WHEAL TREMAYNE.—Capts. John Phillips and W. Blewett (Dec. 29) report—The lode in the 50 fm. level, west of Maddern's shaft, is 9 inches wide, producing good work for tin, opening moderate tribute ground; looking at the level above we expect to find a large piece of tin ground still to the west of this level. The lode in the 40 fm. level, west of Maddern's shaft, is 8 in. wide, with some tin in it, opening tribute ground. The lode in the 30 fm. level, west of Field's shaft, is 3 ft. wide, producing 2 tons of copper ore per fm. of fair quality; we have driven through in this level about 100 fms. of orey ground, the whole of which length will work at an average tribute of 4*s.* 6*d.* in 1*l.* The lode in the 53 fm. level, west of Pollard's shaft, is 8 inches wide, producing some tin; the ground in this level is very much changed for the better; we have about 4 fms. more to drive this level to get under the tin ground driven through in the 40 fm. level; this level is suspended for a short time, in consequence of its being upwards of 120 fms. to put the stuff, also the air conveyed by a machine to work it, which is attended with a great expense; we expect to put through the new shaft to this level by the end of next week, so we shall shortly be in a good position for working the tin ground before us. Allen's branch is much the same as it has been for several months past. All other places in the mine are much the same as when last reported.

WHEAL TRESCOLL.—Captain John Webb (Jan. 3) reports—Since I last reported, we have cut the B lode, east of the cross-course, very rich, so that it will produce 1 ton of tin to the solid fathom, in very fair ground, and a body of water issuing from it; from this we may expect a large deposit of tin; it appears there are several lodes about to form a junction not far distant from the branches we have seen in driving the level; but I am rather fearful, before we have a larger engine to work, we shall not be able to see much of the tin discovered. We have cut the lode that I last spoke of in the south cross-cut, and find it to produce tin—a very kindly lode, but not rich; this lode we never took any notice of before this, but I think it will be productive at a greater depth; our tinstuff at the stamps is producing more tin than I expected. We hope to cut the C lode next month, and hope to cut it very good, as there is a fine course of tin gone below the adit on this lode. I am busily engaged in getting out plans, for the inspection of the company, for the future working of the mine.

WHEAL VINCENT.—Capt. John Spargo (Jan. 4) reports—We have cut the south lode by the cross-cut on the top of the hill; it is about 2 feet wide, producing some good work for tin; I cannot say the real value of it, as we have only just cut it, but its appearance is very promising. We have now about 2 fms. further to drive the deep cross-cut to unwater all the above workings, when we hope to raise a good quantity of tin; the smith, carpenters, &c., are making preparations to erect machinery. We have commenced sinking our wheel-pit, and laying out the lines for the flat rods, &c.

FOREIGN MINES.

ALTEN MINES.—*Mining Report from the 1st to the 27th November, 1848.*

Raipas.—The prospects of the several workings have continued discouraging, and the produce has in consequence experienced a falling off. The greater part of the workings near Monk's shaft are poor, the ground is also hard and compact, and the workmen have made but slow progress with their excavations. The 15 fm. level is now nearly holed with the winze from the 10, and as soon as the communication is completed, we shall remove the penthouse to the 20, and recommence sinking Monk's shaft under that level. The lode in the 20 fm. level had latterly been very fluctuating, and it was found necessary to suspend the level and commence a sink, in which the lode was found more impregnated with ore, and the returns were somewhat increased. The 20 fm. cross-cut is making fair progress towards Labouchere's lode, to intersect which a distance of about 4 fms. still remain, and with the present favourable ground we may expect to reach this part of the mine in the course of next month. The new lode, intersected in the south cross-cut, was found to continue but a short distance, but in the back and bottom of the level, where we have latterly been working, it has developed itself favourably. We have lately commenced a survey for deciding the probability of intersecting the old No. 11 lode to the southward of the bottom workings, and as soon as the whole of the calculations are completed, the necessary exploratory work for determining this desirable object will be commenced, the result of the survey shall be communicated to your board in due course. The winter driving has been resumed, and three cargoes of ore have been delivered to the smelting-house, but the late severe cold, accompanied with heavy falls of snow, has frozen the surface of the Fjord, which compels us to stop the transport of the ore until the next spring tides, when we expect the ice will again be broken up. The greater part of the Raipas workings are less productive than formerly, but the general prospects continue flattering; and, notwithstanding the present deterioration, we are under no apprehension for the future results.

United Mines.—In driving the level north-east from the stopes the greywacke formation has again been intersected, which had the usual effect of removing the lode. This formation is here composed principally of a quartzose grit or sandstone, in which the ore is rarely found to penetrate. We are now exploring the lode on the junction of the grit or greenstone, and the workings are both productive and profitable, with very favourable prospects. The produce of this mine, notwithstanding the falling off in the returns from the level, is not deteriorated, but within the last few day an evident improvement has been visible. The tributers at Woodfall's, and in the other parts of the mine, continue to make good and profitable returns; at Woodfall's, particularly, the workings are looking better than for many months past.

Old Mine.—The returns from here continue satisfactory, the prospects are equally flattering, the tributers work with spirit, and the appearance of the lode in every part of the mine leads us to form a very sanguine opinion as to the result of our future operations.

Ryper's.—Four tributers only are employed at present on the new lodes at this mine, the late severe weather having put a stop to the greater part of our surface operations. The prospects are still flattering, and the produce has experienced no falling off; the quality of the ore has also improved,

Mancur's.—We have resumed operations in the mine, in addition to the usual work nearer the surface; the returns have not experienced any increase, but the prospects of the mine have somewhat improved.

Michell's.—The new lode continues to develope itself favourably, and the tributers make fair returns of superior prilly ore. The continual snow-drifts greatly impede our progress, but the result of our operations is still profitable, and we are led to entertain a high opinion of this discovery.

New Lodes.—The workings here have also been much impeded by the setting in of a severe winter, and the greater part of the surface workings are now necessarily suspended until the spring of next year, when they will be resumed with the usual advantage.

Quenvig.—The exploratory workings have latterly been very partial, and subject to great impediments. We shall continue to work on a very limited scale throughout the winter, and, in the spring, hope to be able to resume some of the other workings, which proved so profitable during the last summer.

Carl Johans.—The prospects continue flattering, and the returns are rich and profitable. The adit level makes slow progress, in consequence of the hardness of the ground. We have, however, intersected two small veins of good ore, and entertain sanguine hopes for the future, when this level is further advanced in the mountain. In the last mining report, you were prepared to expect a falling off in the returns, but when the whole of our produce is delivered to the smelting-house, I am inclined to believe that the deterioration will not be found so great as we anticipated. The unusual long continuance of severe cold, with boisterous weather, accompanied with heavy falls of snow, has been the principal impediment to our progress. The greater part of the surface work has in consequence been suspended, but we hope now to be able to find equally remunerative employment for the workmen in the mines.

[From the *Plymouth Journal.*]

HAWKMOOR.—The shaft is 9 fms. below the old workings, and it is intended to intersect the lode at 10 fms. deep, where the cross-cut will be about 2 fms. In the stopes in the back of the level there is a good lode—about 20 tons of ore will be shortly sampled. The winze, below the level, is suspended for the present, in consequence of the water.

LAMBROOE WHEAL FRANCO.—It is intended to alter the pitwork in both shafts, and to sink the lower shaft from the 40 to the 50 fm. level, and the higher shaft from the 50 to the 60 fm. level.

WHEAL CALSTOCK.—Monday last (survey day) the driving the deep adit level west, on the course of the lode, was let at 5*l.* 10*s.* per fm., and the cross-cut north, in the same level, at 4*l.*; the driving to cut into the lode 10 fms. a-head of the 50 fm. level, in Tree's shaft, at 50*s.* per fm., and the driving north, in the 30 fm. level, towards the north lode, at 55*s.* per fm. There is no alteration in the pitches.

WHEAL FRANCO.—The cross course in the 47 fm. level has been cut through, and the point of the lode discovered on the eastern side of it, where the appearances confirm the cheering expectations held out to the adventurers, by the course of ore passed through in the 39 fm. level, and there can now be no room for apprehension as to this part of the mine. The leader of the lode has not been intersected in the 62 fm. level; but as the end of the cross-cut is letting down a considerable quantity of water, and is now composed of prian, peach, spar, and ore, it is certain that it has not been passed through.

WHEAL ASH.—In cutting the plat this lode has been seen 8 ft. wide, of solid mundic.

WHEAL ANDERTON.—Many tons of tin are on the floors, dressed ready for shipment. The mine is looking well.

PLYMOUTH WHEAL YEOLAND.—The new south lode still holds goods. The lode in the cross-cut, from the engine-shaft, has not been intersected.

PLYMOUTH WHEAL YEOLAND EAST.—Another piece of this lode is being taken down, and it is intended to stamp down a considerable quantity, as soon as the use of the Wheal Yeoland stamps can be obtained.

BIRCH TOR.—The new work is progressing here most satisfactorily—the shaft on the vitifer lode is nearly cleared to the adit.

Mr. BUDD, THE SMELTERS, AND THE COPPER TRADE.

TO THE EDITOR OF THE MINING JOURNAL.

Sir,—There is an old and trite saying, about the use that many people make of a liberal allowance of rope. An illustration of this saying seems to me to have occurred, in a series of letters that has come under my observation recently, on "the copper trade," transferred to your columns from those of the *West Briton*, under the signature J. Palmer Budd. Insinuations have, indeed, been thrown out, that he may have been employed by the proposed new smelting company, covertly to advance their interests. I cannot, however, assent to that opinion; because, although there may be something in his style to warrant such a suspicion, from the manifest alternations of hot and cold matter in his letters, still the "*cold-blast*" certainly, and very naturally with *him*, predominates.

Mr. Budd's fourth letter, in your Number of last week, is introduced in portentous terms—"the veil having now been withdrawn from the copper trade," &c. We have then a string of broad assertions; among others, about the "smelters arresting their own ruin," and "replacing their capital by unusual profit." Now, I frankly confess, that I am not logician enough to comprehend how that could be arrested which never presented itself to notice; or the necessity for unusual means to replace that which had never been lost. It is for men of deeper reasoning powers than any to which I can pretend, to establish those points, and, with the aid of a little "special pleading," it may, perhaps, be accomplished. What I now propose to do, is to deal with a few facts in connection with the subject, leaving to others to discuss general principles; and I see that there is a tolerable share of controversial matter upon the question in your columns, the natural vehicle for such discussions.

Mr. Budd says—"A price of cake copper equal to the standard in 1848, is as *excessively profitable* as a standard 25*l.* per ton above the price of cake copper was *excessively ruinous* in 1841." We have here a full admission, that the smelters' trade has lately been *excessively profitable*. That cannot be doubted. But we have also an assertion, that the trade of 1841 was *excessively ruinous*. Mr. Budd must excuse me if I demur to that part of his case. I will take the price of cake copper at Birmingham in 1841. The average price of the 12 months was 102*l.* 10*s.* I then take the average standard for British and foreign ores, in the two years ending June 30, 1841 and 1842, from the admitted authentic document. It was 108*l.* 6*s.* 3*d.* in 1841, and 111*l.* 11*s.* 7*d.* in 1842, the exact average of the two years being 109*l.* 8*s.* 4*d.* The difference between these two sums—that is, the price of cake copper and the standard—is, therefore, not 25*l.*, but exactly 6*l.* 18*s.* 4*d.*

Having thus shortly disposed of Mr. Budd's premises, will he be prepared to demonstrate, with reference to his conclusions, how much less than a quarter of a million sterling the profits of the six or eight smelting companies were in that unfortunate year, 1841? I do not ask this on slight grounds; and the inference from my question is, that the trade of 1841 was not so "excessively ruinous" as Mr. Budd broadly states. If he had selected one other year that I could name out of the last 10—and I concede only one such year within that period—I should be disposed to admit, that it was not a profitable year; but I restrain myself from the admission, that there was, even in that year, any material loss; and, still less, a state of things that would justify the use of the words "excessively ruinous."

I have here admitted, that, within the last 10 years, there has been a single year in which the smelters have failed to acquire those large profits which have, in the main, distinguished their trade above almost every other in the British dominions. And as all things are good or bad by comparison, I suppose the absence of the smelters' customary large benefits, in that single notable year, is relied upon to justify the use of the general deprecatory terms in which Mr. Budd indulges.

But is the failure of a single year in 10 a fair criterion by which to form a judgment?—I should venture to say not. What, then, is the fair criterion? Bespeaking a little patience, I will endeavour to establish one. It is manifest that, in all Mr. Budd's letters, he is haunted by the ghost of the new smelting company, which has recently been spoken of. I have examined, with some closeness, the reasoning of the promoters of that company, as put forth in their prospectus, or "preliminary announcemement," as it is called, of which a copy is now before me. I have also scanned, in a critical spirit, the tabular matter which is there embodied, calling to my aid the little modicum of knowledge which I possess on such subjects. If it be intended by Mr. Budd to insinuate—for, to do him justice, he has nowhere broadly stated as much—that the estimates of smelting expenses, and other charges, set out in that document, are understated, or that the general advantages are exaggerated, I must be allowed to question the justice of any such view.

I perceive that the prospectus takes in the trade of the three years ending at Midsummer last; and, judiciously resting their figures, as to quantities and prices, upon public documents of admitted authenticity, the promoters make it appear, that the profits of that portion of the smelters' trade which so stands publicly recorded (exclusive of the quantities bought by private contract, and of foreign ores imported direct by themselves), were, for the last three years, 775,289*l.* Not a contemptible sum, that, to be divided among six or eight parties, but chiefly among six of them.

As I take some little interest in the progress of this question, I am glad to see that the parties engaged in it have not fallen into the too common error of projectors—that of exaggerating the benefits of their measure. But that is no reason why a little additional truth should not be told. I would, then, ask Mr. Budd to declare, as a man of honour, whether the 775,289*l.* named in the prospectus of the proposed company is not 100,000*l.* below the actual profits of the three years in question. Will he declare that the amount named is not 200,000*l.* below those profits? In short, is he prepared to maintain, that the profits of the last three years were not above 1,000,000*l.* sterling? If he take any of these positions, I am ready to join issue with him.

But, Mr. Budd may still desire to shelter himself under his admission, above quoted, that, although the trade has recently been "excessively profitable"—by which I may fairly assume, that he means to apply that admission to the three last years—he still chooses to rest upon the assertion, that such excessive profits are only compensatory to the smelters for bygone losses. In that case, if I were to take into account the ten years, from June, 1838, to June, 1848, I apprehend he would be satisfied. Well, I am quite prepared to indulge him in that respect; and thus arrive, as I imagine, at something like a fair criterion. But, Mr. Editor, it would tax your compositors' labour too much to give you all that in figures for the several years. Consequently, both Mr. Budd, and your general readers, must be content, at present, to hear me speak of *general results* for the last ten years; and I will again shape my remarks as interrogateries.

Taking the 10 years, from June, 1838, to June, 1848—which, I may observe, includes the failing year that I have conceded to him—I will ask Mr. Budd, whether the profits of the smelters, for that period, have been so little as two millions sterling? Will he assert, that they have not exceeded two millions and a half? If he is prepared to dispute the accuracy of the amounts conveyed in these questions, I again say, that I join issue with him. Should he accept my challenge, and state in general terms—I do not ask for details—how much below the highest sum last named those profits have been, I will take that as his explanation; and then, Sir, I will trouble you with a full statement of facts and figures, year by year, for each of the ten, and leave the public to judge between us.

If Mr. Budd declines to accept my challenge, then I may, not unfairly I think, ask, what reasons he can offer, in explanation of much that appears in his series of letters? True it is, that "the veil has now been withdrawn from the copper trade"—and the motives, on the part of some, would seem to be too transparent to render such explanations, in any degree, necessary for those who take the trouble of looking below the surface.

I will beg the favour of your giving this letter a place in your columns. If Mr. Budd should condescend to "read it" and still more to answer it, I will take all he may say in a good spirit; and he will soon discover, that he has to deal with one, to whose practice "special pleading" is totally adverse; one who never shrinks from the plainest avowal of his sentiments; and as little hesitates to bring forward, when requisite, all the demonstrations calculated to establish the accuracy of his statements.—A Looker-On: *London, Jan.* 1.

Mr. BUDD AND THE COPPER TRADE.

Sir,—I am very glad to observe, by Mr. Budd's last letter, "that there is not the slightest doubt of a company, possessed of a large capital, being prepared speedily to enter the smelting trade as miners' friends." This must be hailed with delight by all connected with copper mining; and, through the instrumentality of Mr. Budd, will, no doubt, become extensively known. The interest which that gentleman's letters must naturally excite, will make him an excellent advertiser for the new company to which he alludes. A number of my friends connected with copper mines, and indeed with that trade, are so rejoiced at the fact, that they have determined to become subscribers, if possible, whenever the undertaking is brought before the public.

City, Jan. 2. A Copper Miner.

PAR CONSOLS MINE.

Sir,—In the "Review of Mining during the Past Year," published in your last Journal, some inaccuracies occur, with respect to this mine, which I should feel obliged by your correcting. The *present* price of shares is stated to be 800*l.*, whereas the last share sold, on the 4th Dec., 1847, *realised* 1000*l.*, and I am not aware of any share now to be purchased at a less price. Again, the *paid-up* capital upon each share is said to be 900*l.*, whereas the *original* adventurers (of whom more than 19-20ths still retain their shares) were only called upon to advance 55*l.* 7*s.* 7*d.* per share, many pounds of which per share were unexpended when the mine began to pay dividends. Our total dividends are stated to have been 12,800*l.*, whereas they amounted to 19,400*l.*, independent of our adding more than 2000*l.* to our reserved fund.

W. Davis.

Fowey Consols Mine, Jan. 1.

CALLINGTON MINES COMPANY.

At a quarterly general meeting of shareholders, held at the offices, Finsbury-square, on Wednesday, the 6d instant.

Richard Hodgson, Esq., in the chair.

The notice convening the meeting having been read, the following statement from the directors was submitted:—

DIRECTORS' REPORT.

The captain's report contains a full detail of the past operations and present prospects of these mines, and in many particulars these will be found interesting and important. It will be observed, that on the Kelly Bray lode the 90 fm. level has been driven 10 fms. beyond the cross-course, and the indications there are of the most kindly appearance, being such as to give good expectations of a speedy improvement. A favourable change is also anticipated in the 70 fm. level east, where the ground is favourable for driving. At the Kelly Bray engine-shaft, the ground is favourable for sinking, the lode producing stones of copper ore. The 20 fm. level, from this shaft, has been extended 15 fms. east, and the agents confidently anticipate this lode altogether becoming a valuable property. The lead lode, and all other parts of the mine, present much the same appearance as reported at the last general meeting, and all operations are progressing with regularity, order, and energy.

The following report, from Capt. J. S. Phillips, was read to the meeting:—

December 29.—I beg to inform you, that we have completed the tip plat in the 112, north mine, and shall soon be prepared to commence sinking the shaft below this level; the ground in the cross-cut is rather hard. In the 100 and 90 fm. levels south, the lode is rather small, producing silver-lead ores; the backs will work at a high tribute. In the 90 fm. level east, on the Kelly Bray lode, we have driven about 10 fms. since we cut through the great cross-course; the lode presents a very promising appearance, composed of peach, spar, mundic, and stones of copper ores; we look forward to an improvement here, having two small cross-courses at no great distance ahead—the greatest quantity of ores that we have broken from the back of the 70 having been found near these cross-courses. In the 70 fm. level east the ground continues favourable for driving; the lode is small and unproductive; the cross-course we have seen in the 20 fm. level east, at Kelly Bray, we expect to meet with in this level (the 70), we think about 20 fms. from the present end, and look forward to something better than we have lately seen here; we expect to accomplish this in four months. In the winze sinking below this level, the lode is disordered; sometimes we have a good branch of ores, from 8 in. to 1 ft. wide, very solid, at other times poor; the stopes in the back of this level are not looking quite so well, the lode not being so large; they will produce about 3 tons of ores to the fathom. In the stopes in the back of the 50 fm. level, the lode will produce from 1½ to 2 tons per fm.; the cross-cut south, in this level, on the east side of the cross-course, is driving in favourable ground; we expect to see the great south lode, at this point, in the next quarter.

Kelly Bray engine-shaft is now about 3 fms. below the 20 fm. level, the ground is favourable for sinking; the lode is rather disordered, being split, producing stones of copper ores. In the 20 fm. level east we have driven about 15 fms., and have lately intersected a cross-course; the lode to the east of this is rather small, at the present time it is showing signs of improvement, about 8 in. wide, composed of spar and mundic, with stones of copper ores; we consider it advisable to continue this end with full force, and as soon as the spring advances to follow the lode on the back to the east, where it comes in contact with the elvan course, when we may sink on its course to ascertain its character, having no doubt of meeting with something valuable here. In the 40 fm. level east we have driven about 3 fms. on the lode from which the former company made their returns of copper ores, this is the only place on which this lode has been opened to the east of the great cross-course; at the present time we have a second heave by a small cross-course; this lode has a north underlie, and is about 40 fms. to the north of the Kelly Bray. At the south mine, in the 125 fm. level north, the ground is favourable for driving, and congenial for silver-lead ores; the lode is principally composed of carbonate of iron, intermixed with silver-lead ores. In the south end the ground is also softer for driving; the lode is producing silver-lead ores—this level shows a more promising appearance than for some time past. In the 112 fm. level south the ground is softer for driving; the lode is mostly composed of spar, with silver-lead ore; in the north end, we are in the channel of elvans, which is soft and congenial; in this ground we generally find the lode given to bunches, and expect such will be the case here—the lode at present is not rich. In the 100 fm. level north the lode has been hove by a large hard sparry cross-course—we have not yet cut it to the north of this. In the 90 fm. level north the lode is small, producing silver-lead ores. The tribute department, through both mines, continues to look just the same as it has for some time past. The machinery throughout is in good working order.

Statement of Accounts for Three Months, ending with September Cost.

EXPENDITURE.					
Amount of July cost			£1811	13	9
Ditto August ditto			1914	0	8
Ditto September ditto			1741	10	11—5467 5 4
Interest and discount					23 17 9
Directors' attendances	£	62	10	0	
London management		50	0	0—112	10 0
Total					£5603 13 1
RETURNS.					
Silver-lead ore—July, August, and September					£5875 11 3
Copper ore—July, August, and September					812 0 0
Kelly Bray cost—July, August, and September			£1172	3	0
Less copper ore			812	0	0—360 3 0
Balance from last account					220 14 4
Balance					335 4 6
Total					£5603 13 1

Balance, 335*l.* 4*s.* 6*d.*; burnt ores (10 tons), 150*l.*; subsist (September), 190*l.*

The Chairman said, that he had recently been down into the mine, taking Capt. Sprague with him, and had no idea, until he saw it, of the favourable nature of the ground. Capt. Sprague had, at his request, made a report upon the subject, and stated that, from the indications and the cross-courses, there could be no doubt of the existence of plenty of copper, the lode varying from 1 ft. to 12 ft. in width. He recommended the sinking of the north shaft, and stated that they need be under no fear from the Holmbush water, which had hitherto rendered the directors timid; and, if they proceeded, there could be no doubt of the mine proving profitable. From what he (the chairman) had seen, he had no doubt, if they prosecuted the work, they would again get equal returns to what they had two years since. He believed that, if they had then sunk the north shaft, and expended the 1000*l.* paid to the shareholders in dividends they would still be paying good dividends.

A rather desultory conversation ensued, in the course of which the chairman and Mr. Johnson stated, that there could be no doubt that, had the north shaft been sunk a year ago, it would now be returing 100*l.* per month. Formerly the ore from this mine had returned 46, 47, and 48 ozs. of silver, but their last assay only gave them an average of 42 ozs.; but it was a rough assay at the mine, sure to be rather under the mark, and they were not now working the silver ground. They had now in view 170 fms. of ore ground, but the ore was sometimes six months in view before it could be made productive. With regard to the Kelly Bray, it had at present cost thom 8074*l.*, and the returns were 4247*l.*, leaving a balance against the company of 3827*l.*, of which at least 2200*l.* had been expended in openings and plant, so that there was only 1300*l.* against the company, to meet which ore could at once be supplied from the mine. On the whole, no mine had ever presented such a favourable appearance, except the Wheal Maria, particularly considering the fact that no call, until one in December, had been made on the proprietors, it very often costing many thousands in the first instance to bring copper mines into operation.

On the motion of Mr. James, the report and accounts were adopted, and thanks voted to the chairman, after which the meeting separated.

ROYAL SANTIAGO MINING COMPANY.

The annual meeting of shareholders took place at the offices, Broad-street-buildings, on Wednesday, the 3d inst.

The Baron De Goldsmid in the chair.

Mr. Dockar (the secretary) read the advertisement convening the meeting, when the minutes of the last meeeting were read and confirmed. The following report was then submitted:—

In presenting a general report of the affairs of the company and prospects of the mines, the directors beg to state to the proprietors, that the operations which had been originated, and which were communicated to the last meeting, with the object of developing the lodes of the greatest promise, have proceeded during the past half-year with uninterrupted activity. The opinion of the agents of the company, that the pertenencias well merit the expense of proving them, continues unchanged; but sufficient time has not yet been afforded to decide this point.

Since the last meeting, the shaft in the Trevince mine has been sunk to 43 fathoms, and the level extended a considerable distance upon the lode, which opens small; but late letters, however, report that an improvement has taken place, and also a great favourable change of the strata. No material change has occurred in the Descubierta mine.

The company lately denounced a pertenencia, which appeared to the agent to have good indications of mineral; and by the late letters a large lode containing ore, but of a coarse nature had been intersected.

The monthly accounts on the table exhibit to the meeting the expenditure for the last half-year, ending 31st August last, an abstract of which is annexed, and amounts to the sum of 9139*l.* 19*s.* 3*d.*; a large proportion of this has been expended in the development of the lodes in Descubierta, Trevince, and St Patrick mines. The quantity of copper ore raised in the same period, amounts to 500 tons, which was shipped for Swansea, in the *Auricola*, on the 17th November last; and at the present reduced value of ore, will, by estimate, produce nett 3,800*l.*; making, with the interest accrued on the unemployed capital, a total of receipts of 4,114*l.* 2*s.* 1*d.* In the subsequent two months 240 tons of ore were raised, and the directors have the satisfaction of reporting to the proprietors, that the letters received by the last mail, give an estimate that the raisings will be 130 tons per month for the next five months, exclusive of any ore which may be obtained from the lodes in the direction of which the agents operations are progressing.

In the present unsettled state of commercial affairs, it would be inconsistent to hazard a positive opinion; but supposing no fresh discoveries are made, and there should be no advance in the price of ore, still the directors believe, if the mining captain's report be realized, the quantity of ore that will be raised will be sufficient to pay the expenses; they, therefore, trust they are not too sanguine if they feel strong hopes that some of these circumstances may improve, so as to enable the directors to pay the proprietors a dividend the next half-year.

The Chairman said, the simple fact was this; they had spent this half-year 9139*l.* 19*s.* 3*d.* They could avail themselves of great part of that money, but he must say that more than 5000*l.* of it was spent in making discoveries; therefore, a loss had occurred of 5025*l.* 17*s.* 11*d.* Looking at the captain's report, he found they had raised, and were likely to raise, as far as they knew of the nature of the ground, a sufficient quantity of ore to pay expenses, even at the present reduced price. The directors concluded, that without taking into consideration anything more than the quantity of ore they anticipated for the next five months, to say nothing of the new mines in the course of discovery, they would be able to make them a dividend on the next occasion. He expected an increase two ways—first in the price of the ore, and next in the quantity raised. They looked upon these circumstances as favourable for that purpose, without going into any speculative considerations, which might, after all, mislead. Having no further observations to make, he should be happy to answer any questions that might be raised.

A Proprietor saw how the expenses were to be paid, but would like to know how the future dividend was to be paid.

The Chairman said, the new discoveries that had lately been made would go to secure that. They had heard, from the captain's report, that he had got indications of a large lode, containing ore, but of a coarse nature, being intersected. If they got anything from that mine, well and good; but the directors made no calculation of it in speaking of a dividend. He now came to the lodes in the other mines, where it was said that a certain quantity of ore would be raised. The Trevince shaft had been sunk to the 43 fm. level, where an improvement in the lode had taken place, by a favourable change in the strata. In the two months subsequent to the date of the report 240 tons had been produced, and 180 tons per month would pay expenses. Then he supposed an increase in the price, for they all knew how extremely low the price of ore of every description had been lately, from the effect of speculation, not only in this country, but even abroad. Copper had also felt the effect of it; and supposing that again rose in price, they could well afford to make a fair dividend. These prospects led him to advise them still to go on with the speculation.

A Proprietor asked what was the amount of interest?—Mr. Dockar said it was 269*l.*

Dr. Snow wished to ask in what position they were, as regarded the Sanctuary ground. He did not wish the directors to answer it if they did not deem it prudent.

The Chairman said, the subject was discussed at some length at the last meeting; therefore, he need hardly say much about it. It remained just in the same state; and they did not expect to pay any very large sum, in consequence of the law suit: he did not mean to say, however, that they meant to give up all idea of getting something from it. There were circumstances about it which required much consideration; and he trusted the shareholders would leave it to the discretion of the directors, as they expected there would be no fear of their having to advance any large sum in that respect.

A Proprietor asked, if the Cobre Company had not made some proposal to this company?—The Chairman said, they had applied, on several ocassions, either to purchase or to use them at their mines. The directors did not give up all idea of getting some advantage from this; for he would be rather inclined to peace than war with that company.

Mr. Ald. Thompson, M.P., observed, that they might say that the Sanctuary ground had not turned out so well as the Cobre Company expected.

The Chairman: Whether it was good or bad, they had better rest quiet; for the responsibility rested on the directors, who would do their best to advance the interest of the shareholders.

Mr. Hicks then moved, and Dr. Snow seconded, the adoption of the report, which was passed unanimously.

A Shareholder inquired, what interest they received on the unemployed capital?—The Chairman said, that good security was the first thing they looked to, and for that they were aware that the interest was very low, sometimes 2 per cent. and sometimes 2½ per cent. He thought it was only prudent on their part to have a considerable sum of money on hand, to protect the company, in case of any loss occurring. For instance, in the case of the loss of 5000*l.*, it would have been very inconvenient to have called upon the shareholders. On the last occasion, the directors thought they did as much as it was advisable to do, in returning to the shareholders 1*l.* 5*s.* per share; the rest ought to remain as a reserve fund.

Dr. Snow moved a vote of thanks to the chairman and directors.

Mr. Hicks seconded the motion, and hoped the directors would be able to give them the promised dividend on the next occasion.

The resolution having been passed unanimously,

Mr. Alderman Thompson, M.P., said, he had received a note from Sir Samuel Scott, who stated therein that unexpected circumstances had detained him in the country, or he would have been present.

The Chairman returned thanks, and said that no three men could act more in harmony than did the worthy alderman, Sir Samuel Scott, and himself, which was, no doubt, a satisfaction to the shareholders.—The meeting then adjourned.

Quebec Mining Company.—At a meeting of directors held at Quebec, on the 15th Dec. last, two letters were read from Mr. O. H. Matthews, the superintendent of the mines, from which it appeared that the general operations were being conducted in a manner highly satisfactory to all concerned. At Patterson's Mine there were from 1000 to 1200 tons of good ore at surface, the workings on the lode had, therefore, been discontinued, and the forces removed to other work, such as extending levels, sinking shafts, opening cross-cuts, &c. Another large copper vein had been discovered in the bluffs immediately adjoining the Mica Bay station. It was seen near the surface 5 feet wide, with grey ore, and was to be opened on as soon as possible. Operations had been resumed at Le Mesurier Mine, where they had 10 fms. to sink to intersect the lode, which was confidently expected to prove rich in grey copper ore.

East Wheal Rose.—Statement of account to 29th Dec.:—Balance of last account, 2694*l.* 7*s.* 2*d.*; proceeds of sales of lead, 12,416*l.* 2*s.* 8*d.*; Cargoll adventurers, for supplies, water charges, agency, &c., 240*l.* 10*s.* 6*d.*; also for three-fourths of profit, Sept and Oct., 347*l.* 0*s.* 2*d.*=14,798*l.* 0*s.* 6*d.*—To Sept. cost, 2473*l.* 11*s.* 6*d.*; surgeon and club, 33*l.* 3*s.* 6*d.*; to Oct. cost, 2269*l.* 17*s.* 1*d.*; surgeon and club, 33*l.* 8*s.* 3*d.*; bills, 1830*l.* 15*s.* 5*d.*; coal, 600*l.*; income-tax, 200*l.*; dues, 795*l.* 17*s.* 6*d.*; Stannary Court dues, 15*l.* 6*s.* 7*d.*: By dividend of 30*l.* per share, 3840*l.*—leaving balance in hand, 2706*l.* 0*s.* 8*d.*

Gonamena.—At a two-monthly meeting of adventurers, held at Liskeard, on the 28th Dec., the accounts were presented, showing—Call made last meeting, 384*l.*—By labour cost, Sept. and Oct., 251*l.* 12*s.* 6*d.*; merchants' bills, 68*l.* 15*s.* 4*d.*; balance of last account, 87*l.* 5*s.* 11*d.*: leaving amount in favour of adventurers of 26*l.* 6*s.* 3*d.*

West Caradon.—At a two-monthly meeting of adventurers, held at Liskeard, on the 28th December, the accounts were presented, showing—Ore sold (less lords' dues, 279*l.* 13*s.* 4*d.*), 4206*l.* 6*s.* 3*d.*; materials sold, 35*l.* 7*s.*=4241*l.* 13*s.* 3*d.*—By labour cost, September and October, 2641*l.* 2*s.* 6*d* parochial rates, 47*l.* 13*s.* 6*d.*; doctor and club, 40*l.* 2*s.*; merchants' bills, 753*l.* 6*s.* 6*d.*; sundries, 33*l.* 11*s.* 3*d.*; call on East Wheal Agar shares, 39*l.* 15*s.*: leaving balance of profit on the two months of 686*l.* 1*s.* 6*d.*, to which add balance of last account, 14477. 5*s.* 1*d.*=2133*l.* 6*s.* 7*d.*—from which deduct dividend, paid in Nov., 640*l.*, leaves balance in favour of the adventurers to end of October, 1493*l.* 6*s.* 7*d.*

Craddock Moor.—At a two-monthly meeting of adventurers, held at Liskeard, on the 28th Dec., the accounts were examined and passed, showing—Call made last meeting, 53*l.*; balance last account, 49*l.* 13*s.* 2*d.*=102*l.* 13*s.* 2*d.*—By labour cost, September and October, 62*l.* 15*s.* 2*d.*; merchants' bills, 27*l.* 5*s.* 1*d.*—leaving balance in favour of adventurers, 12*l.* 12*s.* 11*d.* A call of 5*s.* per share was made, and the following agent's report was read:—"Immediately after our last meeting, we made preparation for suspending the workings at the engine-shaft, agreeable to a resolution passed at that meeting. We left everything so, that (when required) the water may be drawn out again in 48 hours. We commenced our new operations by costeaning, and found a well-defined cross-course, on which we have extended north from 18 to 20 fathoms. Its magnetic bearing is 7 degrees west of north. The end is now driving at 1*l.* 10*s.* per fathom, and is taking ground speedily as it goes further north. By the aid of this cross-course we shall be able to intersect all our lodes near where they enter West Caradon sett, and also sink at little expense. I feel persuaded, from the appearance of West Caradon lodes coming this way, that had you discovered this cross-course at the commencement of the mine, you would have had something to meet the outlay before now."

Wheal Mary Consols.—At a two-monthly meeting of adventurers, held at Liskeard, on the 27th Dec., the accounts were examined and passed, showing—Ores sold (less lords' dues, 85*l.* 18*s.* 5*d.*), 1485*l.* 7*s.* 1*d.*, from which deduct copper ore belonging to Wheal Sisters, 77*l.* 9*s.* 2*d.*=1407*l.* 17*s.* 11*d.*; add material sold, 14*l.* [illegible] 2*d.*, makes a total of 1422*l.* 13*s.* 1*d.*—By labour cost for Sept. and Oct., 965*l.* 4*s.* [illegible] merchant's bills, 217*l.* 15*s.* 8*d.*; sundries, 9*l.* 12*s.*; Wheal Sisters engine-charge, 60*l.*: leaves balance, being profit, of 170*l.* 0*s.* 10*d.*, from which deduct proportion of Wheal [illegible] Sisters profit and loss, 118*l.* 0*s.* 8*d.*, leaves profit on the two months of 57*l.* 0*s.* 2*d.*; to which add balance of last account, 194*l.* 10*s.* 9*d.*, leaves an amount in favour of adventures of [illegible]—The agent's report was read, from which it appeared there are two pitches working to the west of the said shaft in the bottom of the 50 fm. level, at 8*s.* to 9*s.* in 1*l.*, by nine men each; and one pitch, by six men, at 11*s.* in 1*l.*, with five pitches in the back, by 24 men on tribute, varying from 8*s.* to 12*s.* in 1*l.*; the lode in the 50 end east is about 4 ft. wide, yielding about 1½ ton per fm.; in the western end it is small and poor, in soft ground. In the 25 fm. level, above 30 fms. west from this point, there is a large lode going down, spotted with ore throughout; and it is very probable, if the 50 is extended under the said point, it will be found productive. The lode in the 60 fm. level west, at Wheal Sisters, is large, but at present unproductive. Four men are employed to drive the 25 fm. cross-cut towards the south lode; the distance driven is 5 fms., leaving 10 fms. to intersect it. The lords allow 8*l.* per month for this cross-cut. They had sunk on the south tin lode 11 fms., and discovered tin about 5 fms. from surface in the eastern end of the shaft, where it is 12 inches wide, containing good stones of tin.

Wheal Sisters.—At a two-monthly meeting of adventurers, held at Liskeard, on the 29th Dec., the accounts were examined and passed, showing—Labour cost for Sept. and Oct., 245*l.* 19*s.* 5*d.*; merchants' bills, 53*l.* 13*s.* 8*d.*; lord's dues, 9*l.* 9*s.* 8*d.*=309*l.* 2*s.* 9*d.*—By copper ores sold, 77*l.* 9*s.* 2*d.*; tin ditto, 84*l.* 3*s.* 5*d.*; Wheal Sisters engine charge, 60*l.*: leaving balance against adventurers of 87*l.* 10*s.* 2*d.*, which deducted from Wheal Mary Consols profit of 170*l.* 0*s.* 10*d.*, leaves 82*l.* 10*s.* 8*d.*, 30-97ths of which is 25*l.* 10*s.* 6*d.*; from which deduct balance of last account, 5*l.* 7*s.* 10*d.*: leaves amount in hand in favour of adventurers, to end of October, of 20*l.* 2*s.* 8*d.* The meeting was ad-

journed to the 18th inst., and the following report from the agent was read:—"In the past month we have employed six men in driving the 70 fathom level east from the winze sunk a few fathoms west of the great cross-course. The object is to explore the lode to the east of said cross-course, under where we had the course of ore from the 30 to within 8 fms. of the back of the 60 fm. level. In the 60 fm. level the lode is 4 ft. wide, composed of mundic, spotted with ore. We have driven about 6½ fms., and have not yet intersected the cross-course; but, from the change in the ground, expect we are now within a very short distance of it. Since the last meeting we have intersected the tin lode in the 40 cross-cut, and have driven on it west 8 to 4 fms.; it is about 12 in. wide, composed of peach and capel, and contains a little tin, but not of any value. The tin pitches in the back of the 25, to the east of Wheal Mary boundary, have yielded, in the past two months, 39 cwts. of black tin. The pitches on the copper and tin lodes are at present very poor."

Mining Company of Ireland.—We received, just before going to press, the report of the half-yearly meeting of the shareholders of the Mining Company of Ireland, held in Dublin, on Thursday last. We are happy to find that the company's affairs are in a more prosperous state than in July last; the previous two years' accumulation of culm, used by the farmers for lime-burning for manure, has been cleared, and the demand now exceeds the supply—a circumstance indicative of agricultural and general improvement. A new arrangement has been entered into for a large section of the Knockmahon Mines for 31 years, at a reduced royalty; and, although there was a loss on the entire half-year's workings of 900*l.*, 1600*l.* had been spent in permanent improvements, and the report, upon the whole, was satisfactory. The total assets were 168,316*l.*, and liabilities, 16,020*l.* We shall give the report in our next Number.

MINING NOTABILIA.

[EXTRACTS FROM OUR CORRESPONDENCE.]

Plymouth Wheal Yeoland East.—They have a large and promising lode in the adit level; it is upwards of 10 ft. wide, with tin throughout the whole, but 1½ ft. is good work.

Plymouth Wheal Yeoland.—The new south lode in this mine is yielding very fair work, and only requires two or three levels opened on it to make a good paying mine. They have been carrying down a stope about 10 fms. long, and this has averaged about 12*l.* per fm., and the ground in the back would stope for 8*l.* per fm. The shaft in the old south lode, from which they raised some very rich work near the surface, is down to the 34 fm. level, and the cross-cut driving towards the lode.

SOUTH WALES MINING COMPANY.

Sir,—In answer to the inquiry of "A Miner in South Wales," I may inform him that the mine worked by the above company is called Bodcole Mine, and situate about 1½ mile from the Devil's Bridge, in the county of Cardigan; Capts. Absalom Francis and William Hancock are the managers, and I am the purser.

George-yard, Lombard-street, Jan. 5. T. Thomas.

Illogan and Camborne Mines.—Mr. R. Symons, of Truro, is now engaged completing his map of this prosperous district. We are informed that, in a short time, lithographic copies of it will be published in the same style as the Tavistock map—being No. 5 of the series. The same surveyor has also commenced the other mining districts, so that, when they are completed, few mines will remain unpublished.

An Expensive Undertaking.—The Chapel Hill Pits, at Brierley Hill, belonging to the British Iron Company, are at length freed from the enormous quantities of water—the accumulation of years—which have so long flooded them, and coal has at last been found. The water, two years ago, when operations were first commenced, was 84 yards deep, and the expense attending its draining is estimated at no less a sum than 10,000*l.* This includes the erection of engines, stacks, and whimseys, and the losses occasioned by breakages, &c. The pits had been previously worked, but it is known that an excellent mine still remains to compensate for the enormous outlay in arriving at the treasure.

The Railway Commissioners have approved of one amongst a multitude of plans for ensuring the safety of passengers in railway travelling—the proposal of Mr. Wyndham Harding, secretary to the London and South-Western, and which consists of a series of footboards and holdfasts along the extent of a train, and by means of which, in the event of accident, the guards may communicate with either engine-drivers or passengers.

Chester and Holyhead.—The second tube at Conway was finally tested, prior to its being opened for traffic, on Wednesday. The other tube, which has been in use for many months, will be closed for a time, so as to substitute sleepers of iron for the present ones of wood, Mr. Stephenson having come to the conclusion that iron will be best. The entire structures will then consist of 2,600 tons of solid iron, slung over an actual span of 400 feet.

ACCIDENTS.

Heaton Colliery.—J. Buckham, aged 74, fell from an embankment at the colliery, and was killed. The deceased was engaged in the battle of Trafalgar, and also sailed under Lord Exmouth.

East Cramlington Colliery.—W. Forrester, aged 17, was crushed to death by a fall of stone from the roof.

Brierley Hill.—A collier, named Garner, was severely injured by a fall of coal, while engaged at his work down a pit connected with Messrs. Pearson's colliery, at the Moors. —Joseph Shakspere was also badly hurt by a similar occurrence, at Messrs. Phillpots and Plant's Colliery, at Pensnett.

Hafod Copper Works.—While a poor man, named Price, was assisting to unload some heavy castings his foot slipped, when some of the castings fell on his head, crushing it in a dreadful manner.

Wolverhampton.—D. Thomas, a "hanger on" at Messrs. Sparrow's Colliery, at the Osier Bed, having just hooked a loaded skip on, remained under it at the bottom of the pit, and while it was ascending the shaft, about half way up, a piece of coal fell upon his head, which was sadly cut and bled profusely, and he ultimately expired from his injuries.

Rowley Regis—Waterfall-Lane Colliery.—As three men were ascending the shaft of a pit connected with this colliery, in a skip, Levi Bmg and Joseph Burrowson were forced out of the skip. It appeared that the skip struck against the rock, and broke one of the trace chains, which, tilting the skip on one side, precipitated the unfortunate men to the bottom of the shaft, a distance of 20 yards. Bing was severely injured about the spine, and Burrowson, among divers injuries, sustained a severe fracture of his right leg.

Bumble-Hole Colliery.—On Sunday last, as a boy named Davis was assisting to push a loaded skip along the rails, at this colliery (under the British Iron Company), he accidentally fell, when the skip passed over his right foot, frightfully lacerating the flesh, and completely severing the muscles from the bones.

Daisy Bank Colliery, Sedgley.—John Lane, aged 16, met with his death by falling down a pit, at Messrs. Webb and Page's colliery, while in the act of pushing an empty skip, as he thought, on to the runner, which unfortunately was not over the pit's mouth.

Old Washington Colliery, Newcastle.—A serious accident occurred here, the fatal consequences of which would have been prevented had the excellent apparatus invented by Mr. Fourdrinier, and exhibited in the Central Exchange, been applied to the shaft and pulley. It appears that four pitmen, who were in the "back shift," were entering the tub to descend the shaft, when a rope was then drawn up, for the purpose of putting an empty tub in the iron cage. Instead, however, of standing at its proper level, the rope continued rapidly to ascend, until it reached the pulleys of the engine, which are about 30 feet from the surface. There one of the men, with great presence of mind, escaped out of the tub, and clung to the pulley frames. He was providentially saved, but the other three were drawn over the pulleys, and dashed with great violence to the ground. Two of them, named J. Hutchinson and J. Foster, were killed on the spot. The other was found to be severely bruised in several parts, but he is now in the way of recovery. It is stated that the accident occurred through a boy, who acts as fireman, having charge of the engine, without knowledge to work it.—*Newcastle Journal.*

West Bromwich.—A distressing occurrence took place at the Blockley Wood Fields Colliery, belonging to James Bagnall, Esq. At six o'clock, five men and two boys descended the pit shaft for the purpose of commencing work, but on getting nearly on a level with the workings, they found that there was a quantity of water lying at the bottom. This being an unusual occurrence it caused some alarm, and in the confusion which ensued, the skip on which they were standing upset, and two of the party were precipitated into the water. An alarm had in the meantime been conveyed to the banksman, and the engine was stopped, by means of which the others were enabled to keep their hold of the chains of the skip until it was put right. They were then drawn up to the bank, and it was found that the two men missing from amongst them were Henry Wi[illegible] and Peter Gilgallan. John Jones, the "doggy" of the pit, and or[illegible]bout 2[illegible] named Joseph Hickman, then descended the shaft to recover [illegible] of the workmen, whether they might be dead or alive, but some t[illegible] their unfortunate comrades, the water, when they then proved to be [illegible] the elapsed before they were got out of [illegible].—*Birmingham Journal.*

COAL MARKET, LONDON.

PRICE OF COALS PER TON AT THE CLOSE OF THE MARKET.

MONDAY.—Buddle's West Hartley 14 9—Carr's Hartley 14 9—Chester Main 16 6—Davison's West Hartley 14 9—Hasting's Hartley 14 6—New Tanfield 14—Original Tanfield 13 6—Smith's Pontop 13 6—South Pontop 13 6—Walker's Primrose 13 6—West Hartley 14 9—Wall's End Acorn Close 17 3—Bewicke and Co. 17 6—Brown's 16—Clarke 15—Gosforth 17 6—Hebburn 17—Heaton 17 6—Harton 17 6—Hotspur 17—Killingworth 17 3—Riddell's 17 6—South Killingworth 13—Walker 17—Wharncliffe 17 6—Lambton's Primrose 18—Belmont 18 3—Bell 18—Lyons 18 3—Hetton 19—Haswell 19—Lambton 18 6—Russell's Hetton 18 6—Shotton 17 9—Stewart's 19—Whitwell 17 6—Benson 17—Caradoc 18 6—Cassop 18 3—Heugh Hall 17 6—Hartlepool 19—Hudson's Hartlepool 17 9—Kelloe 18 6—South Hartlepool 18—South Kelloe 17 3—West Hetton 17 6—Adelaide Tees 18—Seymour Tees 17 6—Tees 18 6—Cowpen Hartley 14 9—Derwentwater Hartley 14 6—Hartley 14—Sidney's Hartley 14 6.—Ships at market, 328; sold, 134.

WEDNESDAY.—Buddle's West Hartley 15—Carr's Hartley 14 9—Chester Main 16 6—Davison's West Hartley 15—Hasting's Hartley 14 6—Holywell Main 15—New Tanfield 14—Ord's Redheugh 13 6—South Pontop 13—Tanfield Moor 14 6—Tanfield Moor Butes 13 6—Townley 14—Windsor Pontop 13 6—Wylam 13 9—West Hartley 15—Wall's End Acorn Close 17 6—Bewicke and Co 17 9—Brown's 16—Clarke and Co. 15 6—Clennell 16—Framwell Gate 17 6—Hebburn 17 3—Heaton 17 9—Harton 17 6—Killingworth 17 6—Braddyll's Hetton 19—Bell 18—Lyon 18 3—Hetton 19—Haswell 19 3—Jonassohns 16 3—Lambton 18 6—Russell's Hetton 18 9—Shotton 18 3—Stewart's 19—Whitwell 17 9—Benson's 17 3—Caradoc 18 6—Heugh Hall 17 6—Hartlepool 19—Kelloe 18 9—South Kelloe 17 6—Adelaide Tees 18 3—Cowndon Tees 17 6—Richardson's Tees 16 6—Seymour Tees 17 9—Tees 18 9—West Cornforth 17 3—Cowpen Hartley 14 9—Derwentwater Hartley 14 6—Hartley 14—Llangennech 23.—Ships at market, 249; sold, 106.

FRIDAY.—Davison's West Hartley 14 9—Hasting's Hartley 14 9—Holywell Main 15—New Tanfield 14—Ord's Redheugh 13 3—Tanfield Moor Buie's 13 6—Walker's Primrose 13—Wall's End Framwellgate 17 6—South Killingworth 13—Hetton 19—Jonassohns 16 6—Lambton 18 6—Russell's Hetton 18 9—Stewart's 19—Benson's 17 3—Heugh Hall 17 6—South Kelloe 17 6—Tees 18 9—Hartley 14 3.—Ships, 150; sold, 28.

ALLUVIAL GOLD DEPOSITS.

The accounts which we daily receive of the newly-discovered riches, or gold deposits, of California are calculated at the first blush to excite some surprise, when it is considered that such treasures have not been developed ere the present time; but when it is reflected upon, the little intercourse which has taken place with a country, the locality of which not being one of extended commerce, while its resources are little known, and are only applied with some degree of caution by the natives, for obtaining the luxuries, or necessaries, of other nations.

We read in ancient history of the gold of Ophir and the gold of Dalhi, and, no doubt, at the period these districts were wrought, the gold extracted from them was to an enormous extent; and such deposits, no doubt, exist in many unexplored districts at the present day, and which would appear to be providentially discovered only at sufficient intervals, as to keep up the credit of nations, and thus afford a source of circulating medium of acknowledged value, in the ratio of extended population and increased commerce.

It is a well-known fact that, among the various metalliferous deposits, iron and gold are the most general, and that gold is the most superficial, as in but few instances has any gold formation been found to exist at any notable depth; and where this has been the case (as in the Brazils), it is more dependent on the peculiar character of the deposits, than the nature of gold to exist far under the surface. Gold, whether found in alluvial deposits or *in situ*, is always found in a native or metallic state; while those metals which are found to exist in depth, are invariably found in a mineralised state, combined with sulphur or other mineralising substances.

Gold and platina are the most indestructible of the metals, and, therefore, resist the action of atmospheric or other causes, which would have rendered other metals into such metallic compounds, as would, from their character, have been lost by the fine state of division in which they would have been brought by the effect of washing down from their natural beds, and the attrition to which they would have been subject in the estuaries of the rivers, formed by the mountain streams of the higher ground in which they originally existed.

The only other metallic mineral to which the same observations may refer is the native oxide of tin, so abundant in Cornwall, and this is accounted for from the same causes of indistructibility—the oxide of tin being in such a state of aggregation as to resist even the strongest acids; and these deposits, as with the gold, are found in the alluvial, and were the chief sources of production of the mineral which first brought this island into notice, and yet continues one of the national productions and sources of employment of the population—the only difference being that the tin being mineralised (which, as before said, gold is not) with oxygen, it is found to exist in depth.

Referring again to the alluvial gold washings, there can be no doubt that many localities exist, which would amply repay the capitalist, if there were not contingent difficulties; and such was, no doubt, the object of a party of Dutchmen, many years back, when attempting to discover the sources of the gold region of the so-called gold coast of Africa. The discoveries in California will, no doubt, lead to other developments of the precious metal from the same deposits in other districts, and give better returns to the capitalist than the much more expensive and less probable success of producing gold by the ordinary methods of mining, as with other metals.

THE ELECTRIC LIGHT.

Most of the periodicals of the day have lately given elaborate reports on Mr. Staite's electric light, and of the success of the various exhibitions which have taken place, without any clear and efficient explanation of the process by which the most important point (continuation of its brilliancy) is to be obtained. We have now before us two of the specifications, combining the whole *rationale* of the process—the manufacture of a pure and homogeneous carbon, which is absolutely necessary to secure the light's permanency; and the entire mechanical arrangements for keeping the carbon points at a proper distance from each other, according to the power of the current of electricity. Mr. Staite, in his last lecture, stated that he had before him batteries, in which the action was produced by copper and zinc and dilute sulphuric acid, iron, and zinc, with an acid, &c.; but what he proposes to be the component parts of his battery he must decline, from the state of the law of patent, to disclose until after the 14th of January, when they could be completely registered. He would then gladly not only produce a battery which was self-acting, but self-sustaining, and that it might be locked up for months without being attended to; whilst, at the same time, its products would be as valuable as the articles used in its composition. Hitherto one of the greatest difficulties in the application of electricity had been the want of the means of ascertaining its quantity and density; but that difficulty had been overcome by the ingenuity of Mr. Petrie, by an invention, called a galvanometer, so that it could be calculated with the same accuracy as that two and two make four.

This battery, if successful, will be one of the most important steps towards the full completion of this much-to-be-desired scientific attainment for public and domestic illumination. The *rationale* of the process is, that, if a plate of zinc and a plate of copper are immersed in an acid solution, and a connection, or contact, is made between them by a wire, an electrical action at once commences, which continues until the power of the acid upon the plates entirely ceases. This action goes on almost imperceptibly, giving no external evidence of its existence beyond what is apparent by the gradual decomposition of the materials of which the plates are composed, and of the acids by which the action is excited. If, however, an apparatus, so contrived as to make use of the electrical power, be introduced within the circuit of the connecting wire in such a way as to make the current of electricity pass through the apparatus, the results will become visually and operatively apparent. This is effected by attaching to each pole a piece of charcoal, and then bringing the two points together, re-establish the circuit, the result will be that the two points will give out a pure white and vivid spark of brilliant light. The spark once produced, we may withdraw the points gradually from each other to such an extent as the power of the electricity will allow; and, notwithstanding the separation, the electricity will continue to flow on in a brilliant arc of the purest light, which will endure until the power is expended, or the increased distance between the points, from their wearing away, or disintegrating, becomes too great for the electric power to overcome. In this latter case, the light cannot again be produced until the points be once more brought into *actual contact*. If the carbonaceous points suffered no change, and the electricity remained equal at all stages, there would have been no difficulty in the way.

It would merely have been necessary to ascertain the precise distance of the points at which the greatest illuminating effect would be produced, and there (after having once made contact, and put them in connection with the battery) to fix them, and the thing would have been done. But, unfortunately, this is not the case; the carbon points become disintegrated and broken away, and the power of the battery suffers a gradual deterioration, until at length the distance becomes too great to transmit the current, and the light is extinguished. This has been *the* difficulty. So long as the points are in the hands of the operator, he can at once bring them again together; but to make them accomplish this result for themselves, or rather to prevent the necessity arising for their so doing, has been the task which any one attempting to make the light available for useful purposes has had to a[illegible]mish. In all artificial light there is a deficiency of the blue, and a pr[illegible]onderance of the red and yellow rays; but t[illegible] precisely sim[illegible]o the solar beam, as the spectrum, thrown on a whi[illegible] ground by a prism, will satisfactorily show.

In the construction of the apparatus necessary to effect this self-acting motion, Mr. Staite employs a glass plate, fitted in a brass ring, on which is placed a glass dome, or cover, resting in a circular groove in the plate. A metal rod, in connection with one wire of the battery, is carried up through the plate nearly to the top of the dome, where it is curved, and terminates in a copper holder, in which a solid cylinder of carbon is fixed, pointing downwards. Another copper tube, or holder, passes up through the centre of the plate, and is connected to the other pole of the battery, and in which is placed another cylinder of carbon, pointing upwards, nearly touching the point of the first-named piece. These cylinders of carbon, or electrodes, are guided in their places by triangular pieces of platina, and as they become disintegrated by the electric action, they are forced forward by springs, and kept sufficiently close to transmit the most brilliant and continuous light. There are other modifications of the apparatus operated on by clock-work, which are still more correct, and in one the electric action itself is made to separate, or bring closer together, the electrodes, as the points more or less diminish. The material used by Mr. Staite is an equal quantity of medium coal and Church's patent coke, reduced to powder, mixed together, and heated and compressed in close-shut iron moulds, till it becomes consolidated in a concrete mass; this is then plunged into melted sugar, and, when dry, subjected for several hours to an intense white heat in a close vessel, containing pieces of charcoal. The carbon thus prepared is exceedingly dense and homogeneous, and possessed of just the required amount of conductibility. We are informed, that the formation of the board of directors of the Electric Light Company is completed, but their names will not appear until a battery, which is being constructed under their own inspection, is finished, and acts to their satisfaction. From the disastrous events of 1845 much caution has been evinced by capitalists, but we think there is no fear of this company being successfully carried out, as it offers a fair guarantee for the certainty which is entertained of its success, as that of a really legitimate enterprise, and most valuable agent to the public convenience. Mr. Lighton, a gentlemen of character and ability, has the confidence of some of the more influential persons interested, and his services are actively engaged in the organisation of the company, as a leading director.

Current Prices of Stocks, Shares, & Metals.

STOCK EXCHANGE, Saturday morning Eleven o'clock.

Bank Stock, 7 per Cent., 189½ 91	Belgian, 4½ per Cent., 76½
3 per Cent. Reduced Ann., 86⅝ ⅞	Dutch, 2½ per Cent., 49
3 per Cent. Consols Ann., —	Brazilian, 5 per Cent., 76
3½ per Cent. Ann., 89⅛ ⅜ ⅛	Chilian, 6 per Cent., —
Long Annuities, 9⅛	Mexican 5 per Cent., 25 ½
India Stock, 10½ per Cent., —	Russian, 5 per Cent., 102
3 per Cent. Consols for Opg, 88⅝ ⅞ 9	Spanish, 5 per Cent, 13⅜
Exchequer Bills, 1000*l.* 2d. 42 45 pm.	Ditto 3 per Cent., 26½

Mines.—There has been a fair amount of business transacted during the week. A renewed inquiry has taken place for Devon Great Consols, South Wheal Basset, South Frances, Carn Brea, and several other leading mines, as well as for those of less extent. Devon Great Consols have been done at an advance. Trehane, Trelawny, and Mary Ann have been in request, and several transactions have taken place.

Shares in the following mines have changed hands during the week—viz.: Devon Great Consols, East Wheal Rose, Bedford United, East Tamar, Mendip Hills, Wheal Mary Ann, Trehane, Wheal Trelawny, Herodsfoot, Camborne Consols, Kingsett and Bedford, Caradon Copper, Wheal Henry, Condurrow, Tamar Consols, Tincroft, Devon and Courtenay, Stray Park, &c.

At the East Wheal Rose meeting, a dividend of 30*l.* per share was declared. By the balance-sheet presented, we find that the value of silver-lead ores sold since the last meeting amounts to 13,235*l.* (820*l.* of which was credited at the last account), and the balance carried to the credit of the next account appears to be 2706*l.* The mine is represented to be in a flourishing position.

At the West Caradon meeting a dividend of 50*s.* per share was declared. The balance-sheet shows a profit of 686*l.* 1*s.* 6*d.* on the two months' working. The balance in hand amounts to 1493*l.* 6*s.* 7*d.*

Craddock Moor, Wheal Mary Consols, Wheal Sisters, and Gonamena meetings were held about the same time—full reports will be found in another column.

At the Callington meeting, on Wednesday, the balance-sheet (which had been previously issued to the shareholders, duly audited) represented the sales of silver-lead ores to realise 3875*l.* 11*s.* 3*d.*, and copper ores, 812*l.*; the balance against the company on the three months' working amounts to 335*l.* 4*s.* 6*d.*: whilst credit is given for 340*l.*, being subsist and ores unsold. The captain's report of the mines is highly favourable, inasmuch that considerable improvements have been made since the last quarterly meeting, especially on the lead lode. At Kelly Bray the backs in the 70 are producing about 5 tons of ore to the fm.; and in the 90 the men have gone 10 fms. beyond the cross-course, and approaching under the rich course of ore gone down from the 70 fm. level.

At the Royal Santiago meeting, on Wednesday last, the financial statement presented was to the end of August, showing an expenditure of 9139*l.* 19*s.* 3*d.*, principally employed in developing some new lodes. The returns are about 500 tons of copper ore, realising 3800*l.*, together with interest accruing on the reserve fund, amounts to 4114*l.* 2*s.* 11*d.* The underground operations are represented to have improved, and that about 130 tons per month may be estimated for the next five months.

By the arrival of the steam-ship, *Canada*, from America, advices have been received, confirmatory of the extraordinary discovery of gold in Upper California. Although we were at first very credulous in receiving the vague and extravagant statements furnished, we are inclined to adopt the several authenticated official documents presented as correct—that a grand and important discovery has been effected; at the same time, we cannot entertain the whole, in the present state of excitement, but as greatly exaggerated. We have seen millions of British capital carried across the Atlantic, to explore the gold regions of the south, but we have seen a very small portion returned. Whether this universal loss has arisen from the incompetency of the parties sent out to manage, or the maladministration of affairs at home, we do not intend at present to institute the inquiry, but merely direct attention to the several schemes which have appeared during the week for "gold mining in California." Some have estimated that gold enough may be discovered before the deposit is exhausted, to allow, on division, 10*l.* sterling to every human being on the face of the globe, supposing the earth to contain 1,000,000,000. Such schemes as these are now before the public for adoption; others are preparing, and we have no doubt, before another week, we shall witness the commencement of a gold *monomania*. We have heard of one in course of formation, yet only in embryo, which carries with it a degree of plausibility, that may at least claim the merit of great practicability, and, therefore, more entitled to the consideration of the speculative public. So great, however, is the rage for gold seeking, that, besides vessels for that quarter of the globe previously advertised, Mr. John Shepherd, of Lime-street, advertised one for this modern El Dorado only yesterday; and, in the course of the day, he had no fewer than 25 applications for passages.

We understand that large quantities of bar copper are being imported instead of ores, as heretofore, the effect of which, we fear, will be prejudicial to the English miners. This proves that we were correct in advocating, long ago, the repeal of the duty on the ores, on the ground that smelting would otherwise be carried out more extensively in Chili.

In foreign shares, the transactions have been chiefly confined to St. John del Rey, United Mexican, Bolanos, and Barossa Range.

The following arrivals of specie have taken place since our last:—H. M. S. *Calliope* arrived at Plymouth on the 28th Dec., bringing on freight from Rio 16,000*l.* in specie. The Peninsular and Oriental Steam Company's ship, *Ervx*, arrived at Southampton on Saturday last, bringing on freight 53 packages of specie, of the value of 103,000*l.* sterling.

Hull, Thursday.—The share market has been well supported since our last, and in some stocks a fair advance has taken place. There is, however, still plenty of room for improvement, and we trust the present year will have more pleasant railway reminiscences than 1848. North British, North Staffords, and Great Northerns, are in request at the improved quotations, and there is more demand for low-priced shares.

RAILWAY TRAFFIC RETURNS.

Name of Railway.	Lgth. Rway.	Present actual cost.	Price per share	Last Div.	*Traffic Returns* 1849	1848
Belfast and Ballymena	37½	——	20½	—	391	—
Birkenhead, Lancashire, & Chesh.	19	997,284	37	5 *p. c.**	783	£580
Caledonian	141	3,993,732	22½	—	3501	715
Chester and Holyhead	84	3,014,602	22	4	1084	—
Dublin and Drogheda	35½	774,875	27	1	10	747
Dublin and Kingstown	7½	395,915	—	6	641	743
Dundee, Perth, & Aberdeen Junc.	47½	344,554	25½	8	914	641
East Anglian (Lynn to Ely)	67½	1,167,404	4½	—	737	481
East Lancashire	44	1,733,915	19½	5	1643	830
Eastern Counties and Norfolk	807	10,364,505	12–11½	4	14350	13400
Edinburgh and Glasgow	50½	1,522,232	20	—	1182	1110
Edinburgh and Glasgow	81½	2,556,869	41½	6	3207	3626
Edinburgh and Northern	76	1,722,213	15½	4*	1777	581
Glasgow, Paisley, and Ayr	102½	2,286,353	65	4	2411	2005
Glasgow, Paisley, & Greenock	23½	848,328	14⅝	4	876	922
Gt. Southern & Western, Ireland	131	2,844,897	27	4*	2919	1990
Great Western	305½	11,311,069	91	7	—	21367
Kendal and Windermere	10½	174,600	23	—	119	100
Lancaster and Carlisle	70	1,476,102	54	4	2007	1260
Lancashire and Yorkshire	172½	8,242,628	57–8	6	10407	6833
London and North Western	435	32,853,120	125½	7	34554	35082
London and Blackwall	4	1,299,675	4½	1-12	606	722
London, Brighton, & South Coast	169½	6,284,812	32½	2½	6897	7707
London and South-Western	215	7,139,733	41½	6	8142	8604
Londonderry and Enniskillen	14½	164,643	16	—	—	108
Manchester, Sheffield, & Lincolnsh.	91½	4,651,093	48	5	2892	1998
Maryport and Carlisle	28	443,974	40	½	—	2100
Midland Company	471	13,254,005	96	6	22664	22976
Midland Great Western (Irish)	50	725,332	18½	4*	—	754
North British	99	3,163,459	16½	5	2390	2090
Scottish Central	45½	1,245,496	28½	—	890	2113
Shrewsbury and Chester	47	780,272	11½	5	1650	587
South Devon	55½	1,789,351	15	1½	1450	747
South-Eastern	165½	7,389,322	24–½	6½	7603	7764
Taff Vale	38	820,056	125	6½	1390	1696
Ulster	30	684,684	45½	1½	653	653
Whitehaven Junction	13	150,879	109	3	170	125
York, Newcastle, & Berwick	269	5,038,255	29 8½	8	13112	12327
York and North Midland	95½	4,179,309	50	8	7298	7908

Progress of Railway Traffic.—The traffic returns of railways in the United Kingdom amounted in the year 1842 to 4,400,000*l.*, miles open 1,580; in 1843, to 4,850,000*l.*, miles open 1,590; in 1844, to 5,611,000*l.*, miles open 1,780; in 1845, to 6,670,000*l.*, miles open 2,050; in 1846, to 7,690,000*l.*, miles open 2,650; in 1847, to 8,976,000*l.* miles open, 3,450; and in 1848, the traffic amounted to 10,092,000*l.*, miles open 4,420. The total sum expended on the railways to which these returns refer amounted in July, 1848, to 131,000,000*l.* The average receipts per mile per annum were in 1842, 3,130*l.*; in 1843, 3,080*l.*; in 1844, 3,330*l.*; in 1845, 3,470*l.*; in 1846, 3,300*l.*; in 1847, 2,870*l.*; and in 1848, 2,550*l.*; showing a decrease, which partly arises from the depression in trade, and from the great extent of railways opened during the past two years.

The Coal Railways.—All the railways of the Sunderland and northern districts are about to suspend their operations for a fortnight, in order to mend their ways.

PRICES OF MINING SHARES.

BRITISH MINES.

Shares.	Company.	Paid.	Price.
1000	Aberguesnin	7 ..	—
513	Albert Consols	1 ..	2½
1024	Alfred Consols	8½ ..	5
1000	Antimony&Silver-Lead	5 ..	5½
1624	AshburtonUnited Mines	8½ ..	10
1624	Ballowiddon	9 ..	18
128	Balnoon Consols	25 ..	25
10000	Banwen Iron Co.	6 ..	6½
1000	Barristown	8½ ..	1½
4000	Bedford	2½ ..	2½
1244	Birch Tor Tin Mine	9½ ..	1½
8000	Blaenavon	50 ..	17½
100	Botallack	182 ..	60
120	Brewer	5 ..	7
10000	British Iron, New, regis.	10 ..	13
—	Ditto ditto, scrip	10 ..	10
128	Budnick Consols	52½ ..	35
1000	Callington	19 ..	15
1000	Camborne Consols	5 ..	4
20000	Cameron's Steam Coal	6 ..	1
256	Caradon Copper Mine	9½ ..	3
256	Caradon Mines	22½ ..	10
256	Caradon United	24 ..	5
256	Caradon Wh. Hooper	21 ..	8
1000	Carn Brea	15 ..	100
3000	Carthew Consols	1½ ..	5
112	Charlestown	220 ..	60
512	Coatlithe Hill	1 ..	1
500	Combiawn	8½ ..	3
128	Comfort	45 ..	35
256	Condurrow	20 ..	40
2560	Cook's Kitchen	14 ..	2
1000	Coombe Valley Quarry	3½ ..	4½
6500	Cornish Mining Co.	2 ..	2½–¾
20000	Cornwall New Mining	1 ..	1
1000	Copper Bottom	1½ ..	6½
1024	Coulcon	4½ ..	20
212	Craddock Moor	23½ ..	5
128	Creeg Brawa	120 ..	100
500	Cubert Mine	12½ ..	—
1000	Cwm Erfin	2½ ..	3
300	D.Prior & Buckfastleigh	— ..	—
7100	Derwent	8½ ..	5
845	Devon&CourtenayCon.	7½ ..	¼
1024	Devon Great Consols	1 ..	230
1000	Dhurode	2 ..	5
186	Dolcoath	30 ..	16
2560	Drake Walls	5 ..	4
10000	Durham County Coal	45 ..	9
3000	Dyfngwm	10 ..	12½
512	East Alvenney	5½ ..	12½
112	East Caradon	47 ..	47
2048	East Crowndale	6½ ..	3½–4
512	East Combe Silver-Lead	6½ ..	6½
128	East Pool	15 ..	40
9000	East Tamar Consols	½ ..	¼
—	East Wheal Albert	1 ..	3
94	East Wheal Crofty	125 ..	250
1024	East Wheal Fortune	2 ..	3
128	East Wheal Rose	50 ..	600
—	East of Scotland Iron Co.	5 ..	1½
123	East Wheal Seton	14 ..	10
1280	Esgair Lli	1 ..	2
256	Exmoor Wh. Eliza	6 ..	9–10
512	Fowey Consols	40 ..	45
1024	Freidd Llwydd Mines	1½ ..	3½
6400	Gadair	2 ..	2
4000	Gen. Mining Co. for Irel.	1½ ..	1½
256	Gonamena	44½ ..	16
128	Goonyrea	4 ..	2
160	Great Consols	1000 ..	250
1900	Great Michell Consols	1½ ..	¼
256	Great Resugga Moor	11 ..	6
512	Gt.Wh.Rough Tor Con.	18½ ..	11
1200	Growa Slate Company	5 ..	5
256	Gwinear Consols	7 ..	1
6000	Heigneton Down Con.	¼ ..	1
256	Herodsfoot	18 ..	22
10000	Hibernian	12½ ..	1½
239	Hobb's Hill	6 ..	1½
1000	Holmbush	22 ..	1½
1024	Kingsett and Bedford	½ ..	¼
827	Kirkcudbrightshire	8½ ..	2
2048	Lanherooe Wh. Maria	13 ..	2
252	Lanarth Consols	— ..	10
128	Leiant Consols	90 ..	60
160	Levant	— ..	120
1000	Lewis	16 ..	8
1000	Llwyn Malces	7 ..	7
3600	Llynvi Iron	50 ..	50
256	Lostwithiel Consols	19 ..	14
8000	Marke Valley	10 ..	1½
5000	Mendip Hills	3 ..	1½
5000	Merionetshire SlateCo.	1½ ..	2
128	Metha	34 ..	140
20000	Mining Co. of Ireland	7 ..	5
256	New East Crowndale	3½ ..	2½
128	North Fowey Consols	37 ..	10
100	North Pool	45 ..	500
140	North Roskear	5½ ..	165
262	North Wh. Leisure	1½ ..	2
48000	Northern Coal Co.	23 ..	2
128	Par Consols	55½ ..	1000
8000	Pennant & Craigwen	2 ..	2
100	Penriiw	30 ..	65
1024	Penzance Consols	16s 3d ..	2
512	Plymouth Wh. Yeoland	6½ ..	15
200	Polsaith Consols	5½ ..	4½
2500	Rhoswiddoll&Bacheidon	10 ..	10
10000	Rhymney Iron	50 ..	13
10000	Ditto New	7 ..	6½
1000	Rosewall Hill	1 ..	5
256	Rosewarva Mines	— ..	12

BRITISH MINES—*continued.*

Shares.	Company.	Paid.	Price.
2048	Rannseford Coombe Tin	½ ..	4
128	South Caradon	10 ..	300
1100	South Dolcoath	4 ..	5
256	Sth. Friendsh. Wh. Ann	20 ..	4
256	South Molton	5 ..	10
256	South Tolgus	10 ..	55
256	South Treiawny	28½ ..	3
2000	South Wales Mining Co.	¼ ..	2½
128	South Wheal Basset	110 ..	150
124	South Wh. Frances	160 ..	240
256	South Wh. Josiah	— ..	1½–2
1000	South Wh. Maria	2½ ..	1½
10000	Southern&Western, Irish	2 ..	4
280	Spearne Moor	30 ..	40
256	St. Austell Consols	9 ..	—
94	St. Ives Consols	— ..	330
128	St. Michael Penkivel	5 ..	10½
999	St. Minver Consols	1 ..	6
1000	Stray Park	43 ..	19–20
9600	Tamar Consols	3 ..	6½
1024	Tavy Consols	4 ..	4
6000	Tincroft	7 ..	6
1000	Tin Vale	2½ ..	3½
58	Tokenbury	170 ..	10
256	Tollpetherwin	3½ ..	5
256	Tregordan	2 ..	9
256	Trelane	2½ ..	30
5000	Treleigh Consols	6 ..	1½
2000	Trenance	3 ..	—
96	Treswean	10 ..	150
120	Trethellan	5 ..	16
120	Treviskey and Barrier	130 ..	84
288	Trevean	1½ ..	5
100	United Mines	300 ..	350
256	Wellington Mines	25 ..	20
256	West Caradon	20 ..	130
512	West Fowey Consols	40 ..	12
256	West Providence	9 ..	15
200	West Seton	40 ..	210
—	West of Scotland Iron Co.	240 ..	90
120	West Trethellan	5 ..	30
256	West United Hills	— ..	4½
512	West Wheal Frances	1½ ..	2
256	West Wh. Friendship	9 ..	8
3725	West Wheal Jewel	11 ..	14
256	West Wheal Tolgus	21½ ..	6
256	West Wheal Treasury	19 ..	10
1024	Whiddon Mines	4½ ..	4½
5300	Wicklow Copper	5 ..	8½
107	Wheal Adams	79 ..	30
1000	Wheal Agar	— ..	8
256	Wheal Albert	10 ..	1
240	Wheal Anderton	23 ..	20
128	Wheal Ann	— ..	50½
512	Wheal Anna Maria	6½ ..	8
1024	Wheal Ash	4½ ..	8
120	Wheal Bal	5½ ..	20
256	Wheal Benny	14½ ..	2
256	Wheal Blencowe	21 ..	5
256	Wheal Bucketts	20 ..	5
256	Wheal Calstock	5 ..	12
1024	Wheal Coad	1 ..	4
268	Wheal Courtenay	12½ ..	15
256	Wheal Fortescue	6½ ..	3
388	Wheal Franco	27 ..	18
128	Wheal Harriet	45 ..	—
100	Wheal Henry	— ..	31½
1024	Wheal Lawrence	3 ..	3
112	Wheal Margaret	79 ..	250
512	Wheal Mary Ann	5 ..	14½
208	Wheal Mary Consols	60½ ..	8
—	Wheal Penhale	— ..	12
210	Wheal Prospect	4 ..	7
120	Wheal Reeth	41 ..	150
128	Wheal Rose	60 ..	5
99	Wheal Seton	214 ..	720
180	Wheal Sisters	35½ ..	5
512	Wheal Sophia	3½ ..	5
128	Wheal Spearne	10 ..	75
128	Wheal St. Ann	30 ..	35
550	Wheal Trescoll	4 ..	5½
260	Wheal Trelawny	7½ ..	67½
256	Wh.Tremaine(St.Ervan)	9½ ..	2½
1024	Wheal Tremayne	9½ ..	3
92	Wheal Tryphena	140 ..	265
1000	Wheal Vincent	1½ ..	6
256	Wheal Vlow (Perranz.)	½ ..	¼
184	Wheal Vyvyan	— ..	60
256	Wheal Williams	28½ ..	8
1024	William & Mary Worth	2 ..	2½

FOREIGN MINES.

5000	Alten Mining Company	1½ ..	1½
15000	Asturian Mining Co.	13 ..	2
20000	Australian	3 ..	4½–¾
10000	Anglo-Mexican Co.	100 ..	¼
12374	Ditto Subscription	25 ..	1½
6000	Barossa Range	½ ..	1½
8000	Boimos	150 ..	2½
2000	Ditto Scrip	1½ ..	3½
12000	Brazilian Imperial	23 ..	7½–8
10000	Cobre Copper Co.	40 ..	13
10000	Copiapo Mining Co.	14 ..	2½–3
10000	General Mining Ass'n.	20 ..	10
—	Guadalcanal	3½ ..	5½
5000	Kinistchai Mining Ass.	2 ..	3
20051	Mexican Company	59 ..	—
2000	Mexican & South Amer.	6 ..	½
5000	National Brazilian	30 ..	3½–4
104000	N. Brit. Australasian	1 ..	¼
7000	Royal Santiago	10 ..	4
11000	St. John del Rey	15 ..	12–½
13174	United Mexican	Av. 38½ ..	4½

*** *We should feel greatly obliged by agents, or others interested, furnishing us with such corrections for our Share List as we may not have received through our usual channels of information—our object being, to present as accurate a list of prices as can be obtained—to procure which, we solicit the aid of correspondents in general.*

LATEST CURRENT PRICES OF METALS.

LONDON, JANUARY 5, 1849.

	£	s.	£	s.	d.
Iron—Bar *a*..Wales ...*ton*	0	0	5	5	0
,, ..London ..	0	0	6	0	0
Nail rods ,, ...	0	0	7	0	0
Hoops	0	0	8	10	0
Sheets, single	9	0	9	10	0
Refined metal	3	7	6	3	12	6
Bars, Staffordshire..	0	0	6	10	0
Pigs, ditto	3	0	3	15	0
Welsh cold-blast foundry pig	3	15	4	5	0
Scotch pig *b*, Clyde..	2	4	2	7	0
Do. toughened, Wales	4	0	4	5	0
Stirling's Pat., Glasg.	3	0	3	5	0
Rails, average	5	0	5	10	0
Chairs	0	0	4	0	0
Russian, CCND*c*..	0	0	17	0	0
,, Archangel	0	0	18	0	0
Swedish Steel, fagt.*d*	0	0	15	0	0
,, ,, kegs*e*	13	10	14	0	0
Copper—Tile*f*	0	0	78	10	0
Tough cake	0	0	79	10	0
Chili	0	0	70	0	0

	£	s.	£	s.	d.
Copper—Ordin. sheets, *lb.*	0	0	0	0	9
Old	0	0	0	0	7½
Yellow Metal Sheathing	0	0	0	0	7½
Tin—Com. blocks *g*...*cwt.*	0	0	3	19	0
,, bars	0	0	4	0	6
Refined	0	0	4	6	0
Straits *h*	0	0	4	4	0
Banca, for home con.	0	0	4	6	0
ditto for export only	0	0	3	16	0
Tin-Plates—Ch., IC *i*, *box*	1	2	1	10	0
,, IX	0	0	1	16	6
Coke, IC	1	6	1	7	0
Lead—Sheet *k* .....*ton*	17	0	17	5	0
Pig, English.....	16	0	16	5	0
,, Spanish.....	14	10	15	5	0
Red.....	0	0	18	0	0
White ditto	0	0	22	0	0
Shot (Patent).....	0	0	19	0	6
Spelter—(Cake) *l* on spot	14	15	15	0	0
For arrival.....	14	15	15	0	0
Zinc—(Sheet) *m* export.	0	0	20	0	0
Quicksilver .....*lb.*	0	0	0	3	6

a Discount 2½ per cent. *b* Net cash. *c* Discount 2½ per cent. *d* Ditto. *e* In kegs ¼ and ½-inch. *f* Discount 3 per cent. *g* Ditto 2½ per cent. *h* Net cash. In bond. *i* Discount 3 per cent. *k* Ditto 2½ per cent. *l* Net cash. *m* Discount 1½ per cent. *n* Discount 1½ per cent.

REMARKS.—The business transacted during the past week has not been upon a very extensive scale, but the general feeling of the market is that of increased confidence and firmness. Welsh bars are very firm at from 5*l.* to 5*l.* 5*s.*, free on board at the port. Large shipping orders are daily being received at somewhat lower limits, but which cannot be executed, There has been an improved demand for rails, and makers are firm at 5*s.* advance in price. Dealers in Staffordshire, being satisfied that there will be no reduction in Staffordshire iron at the next quarterly meeting, are giving out orders, which have been for some time held back, in expectation of lower rates. In Scotch pig-iron we have to note a further improvement, and an advance of from 1*s.* 6*d.* to 2*s.* per ton upon last week's prices, caused, no doubt, by the smallness of the stock at Glasgow, and the very scanty supply in dealers' hands. Some large sales were made early in the week at 45*s.*, cash down, and 46*s.*, bill at four months, since which further parcels have changed hands, both here, at Glasgow, and at Liverpool, at 46*s.* cash. To-day we quote the price firm at 44*s.* 6*d.* to 47*s.* 6*d.*—at 46*s.* there are several large buyers unable to get supplied.—We find the exports of Scotch pig iron, during the past year, amount to 162,000 tons, against 143,000 tons in 1847, being an increase of about 20,000 tons. The continental shipments have, however, fallen off; but the quantity sent to the United States has more than made up the difference being 90,000 against 45,000 tons shipped in 1847.

The estimated stock on the 30 Dec., 1845 ..... *Tons* 240,000
ditto ditto 1846 144,000
ditto ditto 1847 60,000
ditto ditto 1848 98,600

The present stock must, therefore, be considered unusually light. In other metals no alteration.

BIRMINGHAM, JAN. 1.—The decision of the South Staffordshire ironmasters, at their preliminary trade meeting, held at the Swan Hotel, Wolverhampton, on Thursday last, is by this time well known. The meeting appears to have been very numerously attended, nearly all the influential houses in the trade being represented, and the sense of the meeting was unanimous in favour of retaining the prices of iron the same as last quarter. We are happy in being able, at the commencement of a new year, to congratulate those interested in the welfare of our busy district upon the sound judgment thus displayed in discarding the motives of retaliation or petty jealousy that would have dictated a contrary course. That South Staffordshire has been miserably undersold during the last quarter by other districts, and that some few orders which ought to have been now employing its mills and forges have been lost through considerations of cheapness, are facts freely admitted; but at the same time it is as certain that such contracts have been unremunerative to the parties supplying, while the purchasers of low-priced commodities often find them hang long and heavy on their hands. The pigs that were made a few years since in this neighbourhood, and sold at 45*s.* per ton, and the rods manufactured from them, are scarcely yet forgotten. It is not by a ruinous competition in cheap production that Staffordshire must maintain its standing—the opportunity of testing the difference now afforded will result in a due appreciation of the old established quality, and that is the ground upon which a stand may be made without fear of defeat. It must also be acknowledged that while there has been a partial deviation, even among respectable houses, under peculiar circumstances, in the prices submitted to during the last quarter, there has been on the whole a more uniform adherence to the quotations of last October than is usually the case; and, in addition to the decided improvement of last week in the prices obtained by London and Liverpool dealers for sales of Welsh iron, we are happy to find that the aspect of commercial affairs generally is now represented as gradually beginning to recover in all the different branches, an opinion which, in reference to the iron trade especially, is borne out by the remarks which we copied last week from the *Mining Journal*. Under these circumstances, it may be hoped that the resolution of Thursday will be cordially carried out during the ensuing meetings. South Staffordshire has a market of its own—a consumption in which no other iron can be substituted with advantage—and the exhibition of a due degree of firmness when customers meet each other during the next week, will, we are convinced, determine the tone of the following quarter, and by the encouragement of returning confidence do much to promote a healthy activity in the trade. The quarterly meetings will take place on the 9th inst., at Walsall, and at the other usual places on the following days.—*Birm. Gazette.*

BOMBAY, DEC. 2.—Copper of all kinds has been in good demand, and prices generally have experienced improvement: stocks are moderate.—Swedish bar iron is much wanted, and no stocks exist. British bar continues in good demand, and 32 r. per candy is readily obtainable for a common assortment. Sheet and hoop iron have improved in value since our last, as also nail rod. Swedish steel in tubs continues in good request. Pig lead has advanced further in value, being scarce and much wanted. Lead in sheets has also advanced, and stocks are moderate. In Spelter there is no change since our last.

LEAD ORES

Sold at the Mine.

Mines.	*Tons.*	*Amount.*	*Purchasers.*
East Wheal Rose	78	£14 14 6	T. Somers.
ditto	40	14 4 6	R. Michell & Son.
Sold at Aberystwith.			
East Logyllas	62½	£ 9 2 6	Walker, Parker, & Co.
ditto	62½	9 2 6	Newton, Keates, & Co.

BLACK TIN

Mine.	*Tons.*	*Price.*	*Purchasers.*
Charlestown	11½	£44 15 0	J. H. Enthoven & Co.
ditto	1½	42 17 6	Bissoe Company.
ditto	½	29 0 6	ditto
Polgooth	18	44 15 0	Calenick Smelting Co.
ditto	17	44 15 0	Daubuz and Bissoe Co.
ditto	15	44 15 0	Williams and Co.
ditto	2	39 10 0	Bissoe Company.

COPPER ORES.

Sampled Dec. 20, and Sold at Andrew's Hotel, Redruth, Jan. 4, 1849.

Mines.	*Tons.*	*Price.*	*Mines.*	*Tons.*	*Price*
North Roskear	125	£4 11 6	North Pool	45	£5 10 0
ditto	122	5 2 6	Tincroft	61	3 5 6
ditto	93	2 19 6	ditto	55	2 13 6
ditto	86	5 6 0	ditto	50	1 17 0
ditto	85	4 9 6	ditto	49	1 14 0
ditto	76	1 3 6	ditto	48	4 2 0
ditto	69	4 0 6	ditto	36	1 7 6
ditto	68	4 17 6	ditto	32	5 14 0
ditto	63	4 13 0	ditto	26	1 1 6
ditto	62	5 7 6	South Roskear	90	4 3 0
ditto	59	1 5 0	ditto	89	3 11 6
ditto	58	5 14 6	ditto	56	1 0 6
ditto	34	3 12 6	Fowey Consols	80	4 9 0
Consolidated Mines	96	5 2 6	ditto	78	4 12 6
ditto	95	5 3 6	ditto	77	3 16 6
ditto	92	5 5 0	Wh. Seton	102	4 11 6
ditto	86	3 12 0	ditto	69	3 17 6
ditto	83	6 4 0	ditto	63	3 14 0
ditto	63	4 2 0	South Wh. Basset	51	7 5 0
ditto	46	4 18 0	ditto	49	7 6 0
North Pool	107	3 11 0	ditto	30	3 4 6
ditto	106	3 5 6	South Wh. Frances	55	7 4 0
ditto	102	3 11 0	ditto	30	11 14 0
ditto	76	3 5 6	ditto	28	7 7 0
ditto	75	3 16 6	East Wh. Seton	16	2 19 6

TOTAL PRODUCE.

North Roskear	1000	£4163 15 0	Fowey Consols	235	£1011 5 6
Consolidated Mines	561	2775 13 6	Wh. Seton	234	967 2 6
North Pool	511	1872 7 6	South Wh. Basset	130	824 4 0
Tincroft	357	979 7 0	South Wh. Frances	113	952 16 0
South Roskear & Wh. Chance	235	749 1 6	East Wh. Seton	16	47 12 0

Average Standard ..... £ 91 3 0 | Average Produce 7½
Average Price per ton £4 4 6
Quantity of Ore ..... 3392 tons. | Quantity of Fine Copper, 259 tons 12 cwts.
Amount of Money £14,343 4 6
LAST SALE.—Average Standard ..... £ 92 1 0.—Average Produce 7½

COMPANIES BY WHOM THE ORES WERE PURCHASED.

	Tons.	Amount.
Mines Royal	188	£864 16 6
Vivian and Sons	523	1784 11 11
Freeman and Co.	159	1150 8 0
P. Grenfell and Sons	913	3406 15 5
Sims, Willyams, and Co.	452	1866 17 8
Williams, Foster, and Co.	1072	4891 2 6
Schneider and Co.	85	378 12 6
Total tons	3392	£14,343 4 6

Copper ores for sale on Thursday next, at Andrew's Hotel, Redruth.—Mines and Parcels.—Carn Brea 676—Par Consols 355—West Wheal Treasury 235—Levant 171—Wheal Tremayne 136—Wheal Agar 72—Alfred Consols 71—Wheal Bucketts 27—Wheal Prosper 23—Gwinear Consols 12—Wheal Virgin 11—Godolphin 10—Trenoweth 7—Wheal Jane 4—Craze's ore 3.—Total, 1813 tons.

Copper ores for sale on Thursday week, at the Royal Hotel, Truro.—Mines and Parcels.—Devon Great Consols, Wheal Josiah, Wheal Maria, Wheal Fanny, and Wheal Anna Maria 1541—West Caradon 372—Fowey Consols 242—Wheal Friendship 212—Poldice 117—Bedford United Mines 114—Wheal Maiden 21—Wheal Jewel 14.—Total, 2533 tons.

QUARTERLY SALE OF COPPER ORES IN CORNWALL—DEC. 31.

Copper ores, 35,972 (31 cwts.)—Fine copper, 3060 tons 11 cwts. 1 qr. 27 lbs.—Amount of money, 176,833*l.* 0*s.* 6*d.*—Average produce, 8¾ and 1-16th.—Average standard, 89*l.* 10*s.*—Average price per ton, 4*l.* 18*s.* 6*d.*

COPPER ORES

At SWANSEA, for sale January 11.—Cubre 80, ditto 77, ditto 72, ditto 63, ditto 59, ditto 53, ditto 52, ditto 48, ditto 42, ditto 105, ditto 104, ditto 101, ditto 100, ditto 99, ditto 65, ditto 66, ditto 61, ditto 58.—Cuba 89, ditto 86, ditto 86.—Gloucester Slag 10, ditto 9.—[illegible] 21 tons.

THAMES TUNNEL COMPANY

The number of passengers who passed through the Tunnel in the week ending Dec. 30, was No. of passengers, 22 560.—Amount of money, £94 0*s.* 0*d.*

CURRENT PRICE OF GOLD AND SILVER.

Foreign gold, in bars .... per oz. £3 17 9 | New dollars ..... per oz. £0 4 10
,, Portugal pieces .... 0 0 0 | Silver in bars (standard) 0 4 11½

EXPORTATION OF THE PRECIOUS METALS.—The following are the official returns of the exports of gold and silver from the port of London for the last week:—Silver coin to Rotterdam, 10,000 ounces; ditto to Belgium, 100,000—Silver bars to Belgium, 30,000—Gold and silver to Hamburgh, 36.

MINING AT PORT PHILIP, NEW SOUTH WALES.—Mr. Allen, of Penzance, has just received a letter from his son who is settled at Geelong in the Port Philip district of New South Wales. The letter is dated June 23d, and Mr. Allen states, that two emigrant ships had arrived, and another, the *Wolf*, was daily expected. Wages were still high, and he also says it is likely that many miners will be wanted. "Mr. Stephens (his friend) was here (he says) last week, and showed me specimens of copper found in Port Philip, and not 30 miles from this. He and I were in search of the lode the early part of this week, but were not successful. The first discoverer is the only person who knows its whereabouts, and we expect to be let into the secret when he can leave town to point it out to us. It is a good specimen of malachite, yielding about 60 per cent. of metal; that the man found, and until Mr. Stephens told him, he did not know what it was. He had the good sense, not to tell other parties."

NOTICES TO CORRESPONDENTS.

We have received a paper from Dr. Murray, on Agricultural Chemistry, which shall appear in our next; also, the paper on the Nickel Mines of Norway.

"A Miner" (Darlaston Green) should address the secretary of the Australian Mining Company, Adelaide-place, London-bridge.

CALIFORNIA GOLD WASHINGS.—Parties requiring information on this subject, can obtain it on application at our office.

We have not received Mr. Miller's "Statistics," or we should have noticed them.

Several Literary Notices are unavoidably omitted.

Received.—J. R. (Neath)—T. M. (Dundee)—A Reader (Llanelly)—A Mine Adventurer (Cornhill).

NOTICES TO CORRESPONDENTS—*(Continued.)*

MR. BUDD AND THE COPPER-TRADE.—"W. T." (Chesapside), after censuring the letters and conduct of Mr. Budd, concludes with the following remarks:—"As fair play is all we want, I would here beg the smelters to let us have it; and to my brother miners I say, talk no more of new companies, for the *new company* has been the death of us: and since the present smelters are sufficiently wealthy for the trade, let us endeavour to induce a better feeling than now exists, in the hope that the Messrs. Williams and Vivian, on a fair consideration of the whole matter, will see that not only is a better price due to the miner, but that it is also to their own interest that the miner should have no well-founded cause of complaint. At all events, for my friends and self, I say, that we are willing to exercise a little patience in this hope, but with the full determination, in case of disappointment, to act forthwith on plans already well considered. I trust, however that common sense and fair play will so far prevail, as to secure to the miner his due; more than this he does not want, but his moderation may be too long reckoned upon! 'Live and let live' should be the motto of 'one and all!'"

The letter of "Anti-Humbug," on the Caradon United Mines, is inadmissible; he must write in a better spirit, and, moreover, furnish his name. We may add, that he suggests an independent report should be obtained from some known competent captain, previous to the shaft being sunk 20 fathoms deeper, which he understands is in contemplation.

IMPROVED RAILWAY CARRIAGE BRAKE.—A correspondent writes—"I am in possession of a model of an invention which promises to become of considerable utility—viz., a railway carriage brake. Not having obtained a patent for it yet, I am unable to say any thing on the subject of its construction. It possesses very great advantages over any of those at present in use. It can be applied by either the engine-driver or guard upon every carriage in the train simultaneously, and will do more towards checking the progress of the whole, than simply dragging the wheels will do; prevents injury to the wheels by friction, as is the case when the brake is applied in the ordinary way at a high speed, or from any other cause. It is far from expensive, and can be adapted to any of the carriages in general use. I feel somewhat anxious to have this invention brought under the notice of those who are likely to feel an interest in the matter, and should not hesitate, under certain conditions, to lay the whole matter before the parties wishing to take it up." Should any of our correspondents wish to communicate with the inventor, we will forward their letters.

MINING IN THE TAVISTOCK DISTRICT.—We have received copies of a long correspondence on the subject of the reworking of Wheal Elizabeth Mine, under the new name of East Wheal Josiah; between Mr. William Watts, of South Tawton, and Mr. Hitchins, of Tavistock, for the insertion of which we cannot possibly find space; and, in fact, the matter can be of little interest to the generality of our readers. It appears that on the 1st of May last, Mr. Hitchins, as lessee, in connection with others, of Wheal Elizabeth Mine, sent round a printed circular to each adventurer, with extracts of the proceedings of meetings at which the company was dissolved, and the licence ordered to be surrendered. It also stated that it had been resolved to resume the workings under a new licence, and offering each shareholder who had paid up in full, as many shares in the new as they held in the old undertaking. To this arrangement Mr. Watts demurred; and wrote Mr. Hitchins, that if he would be allowed to attend the first meeting for the reworking, he would explain whether he would continue his interest or not. Mr. Hitchins replied that this could not be allowed, as it would be productive of much inconvenience, and probably invalidate the contemplated arrangements; but if he intended to continue his interest he had only to say so, and would then be entitled to attend the meetings of adventurers. Mr. Watts states he has had no explanation of the accounts, or under whose authority the old adventure was stopped; and threatens, unless satisfied on the subject, to file a bill in Chancery. Here the matter appears to rest; we have no knowledge, ourselves, of the circumstance, but have no doubt Mr. Hitchins is enabled to give a satisfactory explanation to the adventurers, and the mining public.—We cannot notice the direct personal attacks, and charges of dishonesty, contained in Mr. Watts's communication of the 4th inst.

PATRIE'S PATENT VARIABLE EXPANSION APPARATUS.—We are informed that these improvements (advertised in our last Journal), for the first time in the history of the steam-engine, make the working of steam expansively as easily applicable, to the utmost extent, to the cotton or other mills, as it has ever been to the pumping-engines of Cornwall; and, to effect the highest economy of fuel, it is found needful to cut off at a very early part of the stroke, which the inventors are enabled to do with even greater regularity of speed than such engines have been heretofore able to run.

GROWA SLATE QUARRY.—The letters of Mr. N. Ennor have been forwarded to the parties connected with the company.

MINERS *v.* BUTCHERS.—We are informed that a benevolent individual, largely connected with an extensive mining concern, near St. Austell, recently purchased a flock of sheep at a fair, had them slaughtered, and disposed of to the men on the mine. Our informant says he has not seen any of the men's "*bal*" bills since the occasion, but that it seems probable, ere long, "mutton" may become an item in the usual list of "deductions." This novelty may appear to some as worthy of imitation, but it savours strongly of the truck system, and, as such, ought to be repudiated.

We have forwarded a letter to Mr. John de la Haye, addressed "Post Office, Liverpool."

The letter of "C.," on the Copper Trade, shall appear in our next Journal.

"S. W." (Birmingham).—Charles Green, of Birmingham, took out his patent for the manufacture of brass tubes for steam-engine boilers, without seam or soldered joint—being drawn out of the solid metal—on the 27th June, 1837.

G. W. Whitington (Guildford).—The request shall be complied with.

The letter of "B. W." (Leeds) can only appear as an advertisement.

"E. W. B." (Manchester).—We are obliged for the communication, which shall receive early attention.

"J. J." (Brynmaur).—The office of the Burra Burra Mining Association is in Rundle-street, Adelaide—Henry Avers, Esq., secretary. They have no authorised agents in London, that we are aware of. The particulars respecting the freightage and ships can be obtained of Messrs. Henry Bath and Son, Swansea.

REMINGTON'S BRIDGE.—The insertion of the letter of "A Railway Engineer" (Derby) is rendered unnecessary by the publication of that from Mr. Tyler, in another column. The whole matter is a sad reflection on Mr. Remington.

THE MINING JOURNAL

Railway and Commercial Gazette.

LONDON, JANUARY 6, 1849.

We were enabled to present our readers, in our last Number, with only a hasty sketch of our usual account of the sales of copper ores for the quarter just terminated—the results of the last sales for the year having reached us only on the morning of publication. On a more leisurely revision, we find the quantities of ore sold in Cornwall, and the money value, were exactly correct as we then gave them. The present state of the copper mining trade of the country, tempts us to extend our inquiry into more details than we have usually found it necessary to give, since a controversy that

small the improvement, there *was* an improvement in the last quarter over the preceding one, except in the quantity of ore raised, which fell off last quarter 3054 tons. The standard was higher by 3*l.* 3s. 10d.—having averaged 89*l.* 7s. 1d., against 86*l.* 3s. 3d.; and the price of ore improved 8s. 4d. per ton—being 4*l.* 18s. 4d. against 4*l.* 10s. in the previous quarter. The last advantage, however, is, in some degree, counteracted by the better produce of the last quarter, which was higher than that of the former period in the proportion of 8·564 to 8·412 per cent.

It is important to observe, that, from 1846, down to the present time, the standard, and the price per ton of ore, have gradually decreased (with the exception of the slight reaction of the last quarter above noticed); the standard fell from 106*l.* 8s., in 1846, to 86*l.* 3s. 3d. at Michaelmas last; and the price of ore from 5*l.* 11s. 7d., in 1846, to 4*l.* 10s. at Michaelmas; whilst the produce has gradually risen from 7·833—or (say) 7 13-16ths per cent. in 1846, to 8·564, or (say) 8 9-16ths, in the last quarter—the highest produce, with the exception of one year, in the last quarter of a century.

These constant diminutions in value, have greatly reduced the miners' receipts, as the produce in copper for the last quarter (3080 tons 8 cwts., yielding 176,883*l.*) would have produced, at the price of the year ending Midsummer, 1846, 219,440*l.*, showing a decrease in money, for the last quarter, as compared with 1846, of 42,607*l.*, or 170,428*l.* for the year's work, computed upon the scale of the last quarter's production. This is a deplorable state of things for those engaged in this branch of native industry. Let us hope, however, that, as the last quarter's results exhibited a little improvement upon that which preceded it, we may look forward to such further improvements as may place the British copper miner in the situation to which his enterprise and industry entitle him.

Next week, we purpose giving a corresponding analysis of the Swansea sales of foreign and Irish ores—a more difficult and laborious undertaking than that which we now offer to the notice of our readers—there being no fixed standard, nor average prices quoted with the ticketings, for the sales which take place at Swansea, as in the case of the Cornish sales.

Having, during the past year, frequently animadverted on shareholders delaying the payment of their calls, we think it not an unsuitable time to direct a few remarks to the pursers of mines. It has come to our knowledge that, in several instances, the purser has charged in his accounts, for the shareholders' inspection, at the two months' end, all the liabilities which ought to be included in the two months' making up, but has not paid the items so charged; and, consequently, the shareholders (who too often are not sufficiently exact in demanding vouchers for all charges passed at previous meetings) may find themselves, in the event of the purser getting wrong, or the mine becoming less productive, called on by the merchants for payment of accounts supposed to have been paid by the purser—the liability of shareholders ceasing only on due payment of accounts. Now, this we regard as a very serious matter; and, in the best intentioned manner, recommend pursers not only to pay accounts as soon as charged, but to produce at meetings proper vouchers, and request one or two shareholders present to examine them, and state to the meeting that they have done so, and found all in order. Another point is this, that no order should be given for goods until thoroughly satisfied of their being required; and, on their delivery, that the quality, weight, and measure, should be strictly checked, and, in case of default, the goods be returned. A third point, and one of great importance, is, that the dressing department be carefully watched by agents, as we believe much good may be effected thereby in this part of mining operations. Although we have before us three or four mines likely to become highly productive, to which these remarks are more particularly applied, we throw them out as general, trusting they will be received, as given, with a good intent.

In adverting to the resources of California, in our columns of to-day, which, from the accounts received, would appear to hold out great inducements for the investment or outlay of capital, we trust that parties will not be misled, by hastily adopting the opinions of others, or tempted to believe that, while gold at surface, or in its streams, is to be found, that every other stream equally abounds with riches. We last week adverted to the production of gold in Merionethshire, but, as we then observed, the question naturally arises, how many grains or pennyweights are obtained for the sovereign sterling. We find that the county Wicklow is brought forward as the focus to which attention is to be directed as regards gold deposits. We say, with all due regard to the importance to be attached to the subject, that the valleys which once produced gold to the extent of some thousands of pounds in the year 1805, or thereabouts, when the Government directed their attention, have, for some 30 years, remained untouched and unnoticed, except by the peasantry occasionally picking up some grains.

It was seven or eight years since, or thereabouts, that the late Mr. Crockford took up the district, with the view of working it for gold; and, after an expenditure of some hundreds, if not thousands, of pounds, gave it up. It appears that there is a project to resume the workings; and, while we should hail with pleasure the profitable returns which might arise, we feel it only right to the public, as a medium of conveying information connected with mining enterprise, to suggest caution—having well explored and examined the district. We may be wrong, and should even be glad, to find ourselves so; but, with the information we possess, we should be sorry to be the means, however indirect, of deceiving others. As regards Ireland, we believe every one will give us credit for upholding its interests, which we consider materially associated with its minerals; but so much fraud has been practised on the English capitalist by false misrepresentations—West Cork Mining Company and the Arigna, and others, to wit—that, while we are anxious to advance the interests of Ireland, we will not lend ourselves to mispresentations. We may be wrong, and, if so, shall be glad to be set right; at the same time, we believe credit [illegible] for the course we have taken, without any view [illegible] ing legitimate mining, and not [illegible] judicing any individual interest.

Last week [illegible] we gave the result of the Aberdeen Railway meeting, which took place on the previous Wednesday, whilst our other contemporaries had no notice of the matter until the Wednesday following. From this fact, and from the tone in which the articles in the London press are written, we presume that their reports are taken from the columns of the local papers. We beg to inform the English shareholders, that the two or three papers published in Aberdeen, are all, more or less, under the influence of the defeated party of the directors—or as the latter are better known in the north, of the "clique"—indeed, a leading article on the subject in one of their late Numbers, is, we understand, very like the production of one of these gentlemen themselves. We wish, therefore, to say a few words with reference to some of their remarks. The "trick" attempted to be played on the proprietors, by the offer of the first instalment of the new stock, was plainly for the object of gaining the votes for the minority at the then ensuing meeting, and thus forcing themselves into the board of the company, against the all but unanimous wishes of the holders of old stock—the proper parties, surely, to judge of their qualifications. This was clearly the intention from the extraordinary and sudden manner in which the money was offered, and from the open identification of the apparent agents of the southern companies with that party. For what other purpose could they be so anxious to have their shares delivered before the agreement had been definitively settled, signed, and sealed, although application had been repeatedly made to them for the draft, and it had not yet been delivered? Surely, too, if the southern companies suited their own time in arranging these matters, and in paying the money, the other party had as much right to consult their own convenience, but particularly if the interests of the shareholders were concerned. If the agreement proposed is not carried out, the southern companies and their friends are entirely to blame for it, for the majority of the Aberdeen directors were perfectly willing to overlook any irregularity in the matter by the former, and to carry it out faithfully; and, therefore, if it be broken off, it is a voluntary act on the part of these gentlemen, who can have no rational excuse whatever for not desiring the success of the railway now as much as before.

But as to the claim of the "clique" for compensation for loss on a bold and reckless speculation in the company's shares, into which they had entered, and from which, if a profit had been made, they were to have put it into their pockets! it is the most barefaced impudence we ever heard of! Indeed, it appears that one of the party had actually retired with a profit, while the less fortunate number of these worthies bring the matter before their own board, in order that they may be relieved from the effects of their own folly! How could such an idea ever be entertained? We grieve to see the manner in which they defend themselves. At the first meeting they withdraw the claim; but, at the adjourned meeting, it is denied that they ever made one, but that they simply brought the matter before the directors, and that the opinion of the shareholders would have been taken upon it! What equivocation! If they did not consider themselves entitled to it, why was it "brought forward?" And if the shareholders are to guarantee the directors against loss in their speculations, while the latter are to pocket the gains, we do not wonder at the anxiety to retain so desirable a position. But it was attempted to be explained further, that the compensation was only to have been asked from *ultimate* loss, if, after the railway was finished, and in operation, the shares still remained at a less price than had been paid for them. We find it difficult to account for this sudden want of confidence in the undertaking. Did these gentlemen really consider that the Aberdeen Railway would be so badly paying a concern that its stock would never again rise to par? We thought they entertained very contrary opinions, and shall be sorry if there is any just cause for producing a change.

It is impossible to arrive at any other conclusion as to the reason why "the statement was brought forward," but that it was intended by the "clique," as a strong expression of their opinion, that they were entitled to be *immediately* relieved from the heavy loss upon a certain transaction into which they had entered for their own *personal* benefit, and the gains from which would have been enjoyed by themselves; and, in the latter case, the shareholders would never have heard of the affair. It was undoubtedly their wish to saddle the company with the risk of the transaction from the *present* time, the estimated loss being nearly 100,000*l.*! Few things in the annals of the railway mania can be compared to this.

Since these gentlemen have been excluded from the board, the shares of the company have risen in the market, and we are glad to hear that an arrangement is likely soon to come off under the new management that will doubtless increase their value considerably.

The production of gold has, at all times, been a matter of great commercial moment, but at no period has the attention of the world been so generally directed to the subject as at present, in consequence of the wonderful discoveries in California. By many it is feared that the quantity already found, and said to exist, will disturb the currency, and thoroughly derange all mercantile arrangements and transactions; but, for our own part, we do not apprehend anything of the sort. It is a fallacy to do so. We believe in the reports from California, and believe, likewise, that there are great quantities of the valuable metal still to be brought to light; but, after all, gold is merely worth its value. The enormous cost of all necessaries of life and mining labour in California will not admit of the extraction of the gold at a rate to diminish its present standard, added to which an enormous population will be rapidly established in the country, which, of itself, will be sufficient to absorb the gold for the necessary requirements of trade and commerce. Although there is no doubt that vast quantities of gold have been, and continue to be, drawn, we must not suppose that the whole surface of immense tracts of territory contains the precious metal. The gold is obtained from the bottoms and sides of rivers, and the beds of ravines and brooks, which are filled up in the wet season, and which for centuries have been the repositories of the debris of gold formations washed down from the hills. It seems quite similar to the tin streams of Cornwall, where this useful metal is found in great abundance in the stratum of sand, under the bog, or turf, in the low ground between the hills. So is it found in California and in the same strata—viz.: friable or decomposed granite.

When we read of the existence of a trench 100 ft. long, 3 ft. wide, and 2 ft. deep, yielding $17,000 of gold, we can believe the fact; but as the locality is not described, we presume that the trench was made in the bed of a winter torrent, and that the soil, a few yards from it, would not show gold. About 120 years since, certain adventurers from the province of St. Paulo, in Brazil, discovered the mines in Minas Geraes. They washed up the bottoms of brooks, until the cessation of gold in the gravel, or sand, proved the more productive gold-bearing veins, or fissures, to be near, and thus, among many others, the riches of Gongo Soco first came to light. From the vast extent of territory in California said to produce gold, it is probable that some years will elapse before the surface deposits are exhausted; but when the first fever shall have passed away, with the surface riches which caused it, attention will be drawn to the fountain of this scattered wealth. The mountains will be explored, and lodes, no doubt, will be confidently sought for, whose riches, washed away and concentrated by the elements during centuries, have been spread over the adjacent plains.

All this, however, takes time. With [illegible] population increases, new settlements spring up in all parts of [illegible] world, trade and commerce expands, an extended currency is required; and, therefore, we again repeat our conviction that the currency will not be disturbed by the present discoveries. Besides, we feel assured no lodes will be found, the strata is against it. The gold is purely washings from the granite mountains, which contain gold throughout, but which will necessarily take centuries to accumulate in any quantity. After all, what is the amount of gold found, as compared with the currency of the world? It is as nothing. It is not equal to the falling off in the productions, generally, of South America. It is not equal to the existing and increasing demand for gold, for works of art and of luxury. So far from being alarmed by the California riches, with respect to the standard of gold, we are inclined to consider them merely as keeping pace with the requirements of the times, and will, no doubt, lead, and justly, to the more energetic workings of existing gold companies, and probably to the formation of new undertakings for the purpose.

As there is considerable similarity between the gold deposits in California and those which enriched the Paulistas in Brazil, an analysis of the most successful of the English mining companies established in that empire will be interesting to our readers; we allude, of course, to the St. John del Rey Mining Association. This company work three mines contiguous to each other, and drained by the same water-wheel; the lode in two of the mines varies in width from 8 to 32 ft., averaging 14½ ft.; and the third, the Gamba, 4 ft. 7 in. The lodes dip bodily at an angle of 46°, at which incline the pumps are carried, and on the same plane the kibbles from the stopes under the inclined shaft, are hauled to surface. There are two water-wheels for drawing stuff—one for the saw-mill, and one at the reduction-house for working the amalgamation barrels, working 96 heads. The whole body of the deposit, between the walls, gives gold, yielding in different sections 2½ to 5½ oitavas to the ton—104 oitavas being equal to 1 lb. troy. In the Gamba Mine, lines of quartz, running into the country, broken for the convenience in working, give 1 to 1½ oitavas; each section of the mine is very regular in its contents. The average produce for 1847, was 4·21 oitavas per ton, which was worth in London (net) 7s. 7d. per oitava, or 39*l.* 16s. per lb. troy. A cubic fathom of the deposit contains something more than 20 tons; and each fathom sunk in the three mines admits of about 9000 tons being broken, and the stopes kept in order. Westward, a continuation of the deposit near the surface has lately been ascertained, and is already opened upon, to the extent of 19 fms., from 8 to 12 ft. wide, which adds further to the resources of this magnificent mine. This new ground is close to the stamps; and there is no doubt, we are assured, of its continuance westward, as there are considerable excavations of the "old" people in that direction. This mine is now giving a clear profit of above 3000*l.* per month; and, humanly speaking, a great increase is certain, as a powerful set of new stamps has just been completed. This is undoubtedly a most satisfactory state of things for the shareholders, and will enable them to receive frequent and good dividends; but what is it in comparison with the metallic circulation? And should the production continue to increase to the fullest expectation, or were there many other mines equally remunerative and yielding, we should not for a moment apprehend any alteration in the metallic currency of the world.

We beg to refer to the reports of the late meetings of the North British Australasian Company in another column. The principal subject of discussion appears to have been the advertisement of the meeting which appeared in this Journal. A Mr. Ross (a member of the committee of inquiry) complained, in no very measured terms, of the statement it contained, that Mr. James Anderson was acting "for the committee of shareholders." His observations are so extremely absurd that they do not deserve a notice, but from the fact already mentioned, that it formed the chief topic of discussion. Now, in the first place, we have yet to learn that the shareholders in any company have not a perfect right to inform their brother-partners at a distance of any important fact concerning their mutual property, not excluding the calling of a meeting. No directors on earth can prevent it. But we were substantially correct in saying that Mr. Anderson was acting for *the* committee of *shareholders*, which was not the committee of *inquiry*. Mr. Ross may rest perfectly satisfied, that the shareholders will not understand that he or *his* committee were acting for them. There is no fear of that—so let him be at ease on the matter. But, we repeat, that Mr. Anderson *was* acting for *the* committee of *shareholders*—namely, that which he himself stated at the last meeting, "the Buchan partners." Our attention was drawn to the point in the first advertisement, by the party who ordered it; and, for the benefit of such people as Mr. Ross, we altered the said clause in the second into the words, that he was "acting for himself and other shareholders," which appears to be the fact by his own admission, and which is substantially a committee of the shareholders; and, in that capacity, he requested proxies from those who took the same view of the company's affairs, to protect their interests at the meeting. Mr. Ross and his friends succeeded, by their childish and ridiculous observations on this trifling matter, to divert the attention of the shareholders from the proper business of the day; and the result was as might have been expected. But we cannot help blaming the minority for want of sufficient spirit, in not demanding that the votes be taken according to the number of the *shares*, as required by the deed, and thus have learnt their relative actual strength. We hope they will apply themselves with renewed exertion to their cause; and, by a firm and resolute action, they cannot but conquer in the end. Let them follow the example of the shareholders of the Aberdeen Railway; if they do not, they have no prospect of improving the value of their property. They will continue to have our good wishes, and zealous endeavours, in their behalf.

It appears to us that the company's affairs are too various, and, consequently, too complicated to be under one management. Let them be either an agricultural or a mining company—both together, on an extensive scale, is too great an anomaly. It will be observed, that Mr. Anderson's party was defeated by that of the directors by 44 to 22, on a motion to print the reports. It appears to us a strange thing, that this proposition was not unanimously agreed to. What satisfactory explanation can the directors give? Is there anything in it they do not wish the distant shareholders to be acquainted with? For what purpose was the committee of inquiry appointed? Must not a report be somewhat important to *all* the shareholders, which took six months to write? Let the directors answer these questions, and, unless they do so satisfactorily, they cannot blame the shareholders for drawing their own conclusions.

We noticed at some length, in last week's Mining Journal, on the position of Cameron's Coalbrook Steam Coal and Swansea and Loughor Railway Company, in which we called attention to the offer of Mr. W. P. J. B. Cameron, advertised in that Number, as well worthy of some consideration on the part of the complainant shareholders, if only to lay the foundation of further investigation into the present state of the company's affairs, induce the development of other plans for reaping the advantages the property undoubtedly holds out, and most important of all, prevent the disastrous effects which will ensue to all, if once the matter gets into the voracious maw of Chancery. We are sorry to observe, that Mr. Cameron's offer is not met with that conciliatory spirit by the complainants, in which it was, we think, evidently given. An advertisement has appeared in the *Times*, from the committee of the complainant shareholders, which from the language therein embodied, and the feeling evinced, would appear to defy all attempts at compromise; a jest is made of the entire proposal, which the concoctors of the advertisement have discussed under nine heads, in all which it is insinnated, that the motive for the offer is only to get more money from the shareholders—to bind them hand and foot, and their property, to the will of the board of directors, and that the proposal and security for its being carried out are merely on the unsupported allegations of Mr. Cameron, the son, only—the father (Col. Cameron) and Mr. N. P. Cameron (the chairman) not at all appearing. We are sorry to see this spirit prevailing, as it has evidently originated with a few litigious shareholders, and cannot help thinking the advertisement premature, and that it should at least have been left until an explanation had been heard at the ensuing meeting, to take place on Wednesday next, for the express purpose of considering the subject. Mr. Cameron proposes that, in the first place, a sufficient sum shall be raised to effect the "great winning" of the mine, and a junction with the Llanelly Railway, and to continue working from present openings, during the progress of the "great winning," *as soon* as the junction is effected. If this is done, and he is allowed to superintend the works, subject to the approval of the consulting engineer of the company, Mr. Cameron proposes to forego all dividends on his shares—in which alone he has been paid for the property—until all the other shareholders have received 5 per cent. per annum on their shares for a fixed period of seven years, by which time he calculates the money to be borrowed will have been paid off. He then proposes to pay the shareholders 10 per cent. per annum until the whole of the subscribed capital has been refunded to them, when the property is to revert to himself. In making this proposition, Mr. Cameron very fairly states, that if the shareholders are not prepared to accept it, he hopes they will endeavour to devise a better plan, as "any plan is better than going to law."

We would drop a word of caution to those who are so opposed to the consideration of any plan for the best interests of the company, that as sure as they get into Chancery, so sure will they stick there, until the expenses will eat up the value of the entire property; and the shareholders not only never get a farthing, but probably be mulcted in heavy costs; while there are yet means, if all would join heart and hand to carry them out, by which the company might be resuscitated, and the wealth of the property developed. Whatever may have been, or now is, Mr. Cameron's motive in this proposition, it deserves at least fair consideration and discussion. It would appear that even the committee are not all very sanguine on the subject of determined opposition, one of them, Mr. Danford, not having signed the report presented at the last meeting, it was not received by the chairman. We would say to all, attend the meeting on Wednesday next, and hear and judge for yourselves.

London and North-Western Railway.—The following is the number of persons employed on account of this company, including those occupied in the collection and delivery of goods:—2 secretaries, 1 manager, 2 superintendents, 966 clerks, 3054 porters, 701 police constables, 738 engine and firemen, 3347 artificers, 1452 labourers: total number, 10,263. The number of horses employed is 612, ditto vans, &c., 253.

SUPERFICIAL PRODUCTION OF METALS;

OR ALLUVIAL METALLIFEROUS DEPOSITS—NO. IV.

BY E. HOPKINS, C.E., F.G.S.

The California gold "scramble" has produced quite a sensation in the mining world. Some doubt the veracity of the communications, whilst others take a more rational view of the matter. California is a gold country, similar to the Ural in Russia, and, indeed, like all other gold washing countries in every part of the world—the same description is applicable to all containing alluvial deposits washed from the surface of auriferous granites. These deposits are more or less concentrated, some are very rich, and others poor; but it is the production of the washings in the former alone is noticed, and the whole area of the country is hastily considered as of equal value, and thus give rise to the exaggerated accounts we see in the public papers; and political motives on the other side of the water, have encouraged these glittering embellishments. However, having lately been engaged in making a very extensive geological survey on the coast of the Pacific, and the inspection of the gold regions, and having specimens from Choco, Panama, Veraguas, Central America, and also from California—the cinnabar, as well as the auriferous granites—I am able to confirm the accounts within certain limits. California will, doubtless, continue a gold producing country; but it will depend on judicious selection of localities, and the mode of working adopted in each establishment, with their respective administrations, to render them profitable to large companies. The system of extraction must be similar to that adopted in Choco, Veragus, and the Ural in Russia.

The gold washings of El Mineral de Veraguas, like those of California, have been once very productive, and are still the most important in the Isthmus of Panama; these washings have been worked since the Spanish conquests. Towards the end of the last century, some of the Spanish Creoles obtained from the unexplored ravines, or rather from the bottom of gullies, which had been filled up by the accumulation of sands, upwards of 20 lbs. of gold weekly for some months, and lumps weighing many pounds. Even during the years 1800 and 1804, there were introduced into the provincial treasury from the River Conception and its branches 2067 lbs. to pay the 3 per cent., being 3 per cent. of the produce of these washings. Since then, however, like many other gold washings, the great deposits have been exhausted—the present washers are limited to the daily decomposition of the granitic mountains. It is not impossible but there may be still undiscovered *filled up ravines*, the usual golden stores, which some fortunate individual may yet meet with in that neighbourhood. When I made my survey, in 1847, the produce of these washings had dwindled to about 100 lbs. annually. All the gold is in coarse grains, and of a high standard, and is produced by granite containing the brightest yellow mica. The great labour and cost attending the present washings render it comparatively a poor speculation, and totally unavailable to companies,* owing to the impossibility of employing machinery to such scattered and irregular works, where it is necessary to remove all the bottom stones by hand. Those who have worked there, with a few hundred slaves, have, ere this, done well; but not with free and high price labour, since the principal ravines have been exhausted. The present natives, who work *per se*, are expert washers, and know the localities where the gold mostly accumulates, and the granite which produces it; yet, notwithstanding this important acquisition, and climatised so as to bear the hottest sun and heavy rains, and live like the beasts of the mountains, feed on the coarsest food and almost without clothing, they do not now, on an average, obtain above the value of 2s. worth of gold per day each individual. To an European the gold washing scenes is a picture of misery, having none of the ordinary comforts of life, and almost without food and without shelter.

Extensive and uniform deposits, like those formerly existing in Choco, worked by slaves, and similar to those now in operation in the Ural, where one man is able to extract sufficient stuff in 10 hours to produce 2*l.* 10s. worth of gold from the washing machines, will do well for companies, whilst the uniformity of such deposits continue.

Tin stream miners, and the native gold washers of Choco and other parts of America, are the most suitable persons for carrying on the operations, as the character of the deposits is similar; but the tinner should know the quality of the richer variety of granites; neither, on the one hand, be led away by the glittering yellow mica, nor, on the other, neglect the indication of this essential ingredient in auriferous granites. It is like schorl in tin granite—an important guide. The extraction of the gold from these deposits is not attended with such losses as that sustained from mineral extracted from veins. In the latter the gold predominates in an impalpable state, whereas the gold produce as above, is in large grains, and can be extracted by the ordinary machinery of riddling, sifting, and separating, on the principle depending on the difference of the respective specific weight of the sand and gold. I have already explained, in the previous papers, the general character of these formations, and also in my report of the gold deposits in the Isthmus of Panama—therefore, I need not dwell again on that part of the subject. What is most required now in the gold region of California, is a judicious supply of materials for working, as well as the ordinary necessaries of life, and those who make early shipments, will, doubtless, reap an immense benefit. Upper California is situated between the latitudes of 30° and 40° north on the Pacific coast. The gold country extends east to the foot of the chain of New Mexico, which is principally formed of ferruginous and friable granite, and from which the Sacramento, Colorado, Gila Prieto, and many other rivers, take their sources, and disembogue near San Francisco, Monteroy, and also within the Gulf of California. The gold washings of San Francisco have been long known, and attended with more or less success in the limited operations carried on by the natives, according to the seasons, wet or dry. Large products have hitherto been considered as extreme cases of good fortune. However, the average produce per head of a large population of hard-working men, engaged in digging and washing such extensive unwrought deposits, must be high, but, probably, not equal to the lowest average computed by the American officers, with many of whom I conversed and received specimens from whilst in the Pacific. Their information had been principally derived from the usual high-coloured statements of the inhabitants of golden districts, and not from personal knowledge, by which the uninitiated is easily led away. The valley of the Sacramento appears as yet the principal scene of operation, where the deposit formed by the detritus of the bordering granitic ridges, forming extensive flat lands, is intersected by numerous trenches, in the bottom of which the gold is found with black ferruginous sand, the constant companion of the precious metal. Besides the principal valley, the gold is also found in the lateral, or feeding, gullies; indeed, these are, comparatively speaking, the richest parts, and some of the larger lumps are obtained from these small ravines, especially towards the upper part of the valley. The granites are very ferruginous, and subject to rapid decomposition, and where these are deeply intersected by ravines, and embracing an extensive water shed, the bottom of the valleys, and particularly towards their respective heads, become enriched with large deposits of gold.

The lucky individuals who dig into the heads of the richer valleys often obtain a large amount of the precious metal, and from this arises the exaggerated statements, because it is supposed, by those who do not understand the subject, that every part of the deposits are of equal value. The gold washings of Veraguas, near Central America, were formerly equally as productive; immense wealth was obtained from them, more especially near the Caribbean coast, but these rich concentrated deposits have been long exhausted. The poor washers still obtain a living, and will continue whilst the granitic ridge is in existence. The annual produce of Veraguas amounts now to about $40,000 (this is almost the only returns of the country for foreign products), obtained from the labour of some thousand individuals. The plains at the foot of the California granitic ridges are much more favourable for the accumulations of extensive deposits than that of Veraguas; therefore, there is greater probability of their being more lasting and somewhat similar to the alluvial deposits of the Ural and Choco. Another and most important element, requiring consideration, in gold districts is water, inasmuch as, without a constant and abundant supply, little can be done, because the gold can only be separated economically from the sand by means of water; it is, therefore, as essential to look out for localities which furnish a good stream of water, as it is for those containing the greatest quantity of gold. These kind of works require portable machines, easy of removal from place to place, as no permanent dependence can be placed on one locality. There are a great number of places on the Pacific coast offering equal inducement; but, to render them profitable to companies, require a judicious selection of men and materials, and the exercise of great caution in the mode of proceeding, as well as the careful extraction of the gold in the final operation. Little can be done in systematic working until the gold "scramble" is over, and legitimate authority and control established. However, early shipments of proper implements for the work, gold purchases, &c., will, doubtless, lead to beneficial results, if instructed by competent persons, or done by those acquainted with that business. I have been led to make the above observations on California, in consequence of the excitement which now prevails respecting that region, with the view of giving some idea of the real state of the case, so as to avoid the consequence of either extremes; and as the subject is intimately connected with these papers, probably it will not be considered irrelevant at the present time; at another opportunity, I shall return to the original subject.

* See my Report on the Isthmus of Panama, published in the *Mining Journal* of April 8, May 27, June 3, and June 10, 1848.

THE BANK CHARTER ACT OF 1844, AND THE INDUSTRIAL INTERESTS OF THE COUNTRY.

IV.—THE BANKING INTEREST.

The dependence of industry on monetary transactions has come to be considered as one of the most delicate and important of questions, both for the politician and the economist. That the monied interest held the reins of enterprise was well known to the framers of the Bank Charter Act; but they were in the dark respecting the consequences that would result to their own funds, whether placed in Government or in other stock, when restriction should be enforced against miners, manufacturers, and fixed capital in general. They had, in fact, overlooked the distinction we drew in the outset between book and bill transactions, and such as can only be carried on through the agency of coin, or of notes.

If bankers now, as in the olden time in England, or as they still do in many parts of the continent, kept the money in which they deal in their strong boxes, increasing the circulation by an exact amount when they issued a sum, or diminishing it in the like proportion when the same sum returned to them, they might indeed aspire to control the money market, and exact their own terms when their assistance was wanted. It would then unquestionably be of great advantage to have the privilege of a right of issue, and all who enjoyed that right would look with jealousy upon such as augmented the circulating medium. It would become clear, in short, why they wished that notes should only be issued according as gold was absorbed; and (if bankers had the making of the law) we might, without much sagacity, predict that they would cause notes to be called in according as gold found its way into circulation. How long the trading community would submit to such a state of vassalage it is needless to calculate; since history tells us, and the instances we have adduced from continental states continue to show, that the trader possesses in his wares a fund, which the intelligent tradesman can use without troubling the money dealer. Gold and silver are only commodities like other things, and notes have circulation as vouchers for the existence of gold and silver to pay them with; consequently, for such as rather desire other commodities than gold and silver, notes, or bills representing such other commodities, will answer, and always have answered, as well.

There are, therefore, two bases to issues of notes, totally distinct from each other. One is extraneous to the trade of a country, and rests in the gold and silver, or the property in lands, or Government revenues, which its notes represent. The other bases its issues on the trading transactions themselves; for its notes to be good, these must be *bonâ fide* and well-judged undertakings, and all the paper circulated on the responsibility of the trader must not exceed the value of the *marketable* produce which his industry creates. The discovery of this last-mentioned source of a currency is the distinguishing characteristic of modern trade. By this discovery the merchant has been emancipated from the dependence felt by the traders of the Hans Towns, of Venice, and of Genoa, who were obliged to deal through factory clerks and colonies in distant parts, and who were necessarily monopolists, because they did not hold the key to the universal market. When the Hanseatic merchant of Cologne sent wares to Novogorod, he lay out of their value until he received a return. A merchant now draws on his consignee against goods consigned, and his draft enables him to go into the market again as a purchaser whenever he chooses.

This being the state of things when the Bank Charter Act was passed, it is clear that any limitation of the issues made upon *securities extraneous to trading transactions* would only affect trade to the extent that notes so issued, or coin, happened to be necessary. The whole range of trading operations, therefore, in which no payment of wages occurred, and in which credit had been organised, was exempted from the operation of the Act. Wool might be brought from Germany, and wine from Spain or Portugal, and be paid for by products shipped from British ports, without coming at all under the operation of the Act of 1844.

But since it would be necessary to avoid articles involving payment of wages, it is clear that the articles exported would, when a pressure occurred, be chosen from raw, rather than from manufactured, products. To this extent, the bill of 1844 could modify trade. It would dispose our merchants to send out raw materials, and to import manufactured goods from countries (if there were such) where wages were paid without difficulty. This bill, however, did not, and would not, control all kinds of trade; and the extent of business quite exempted from its operation, was measurable by the power our merchants possessed of devising means to emancipate themselves from dependence upon coin and bank notes. To the extent that their own paper (bills) could be employed, they were free; and the great risk which we ran, if circumstances had not brought on a salutary crisis, was, that we might have grown, like the Dutch, a nation of mere traders, instead of continuing what we were, a manufacturing people.

On the other hand, where credit has to be extended even in accustomed channels; as, for instance, when our imports of grain from Russia or the United States far exceeded our shipments to those countries, gold becoming necessary to balance the exchanges, such portion of our trade as required gold to carry it on, was sure to suffer from the high value which that metal attained, as a necessary in the payment of wages at home. To procure gold for exportation, the merchant has to compete with the manufacturer in the money market. Corn was, therefore, rendered by so much dearer as gold was in demand; hence the occurrence of the necessity to import wheat at the moment when wages began to be affected by the means devised for limiting issues, brought about the crash in which many were involved, whose attention had been too exclusively directed to raising the value of their wealth in a circulating medium, to attend to the state of the investments in which it was deposited. The most dangerous case for the nation which can be surmised, and from which it is clear we are by no means, in the present state of Europe, exempted, is that of a war like the last, when all the gold was exported, either to carry on foreign trade in parts where credit was destroyed, or for payment of troops. As long as our country banks supplied the wants of their immediate neighbourhoods by issues convertible into those of the national bank, the inconvenience was not felt, and we were able to stand against the world, without any hoard of bullion whatever. Since our country banks are now too much limited in their functions to do the same on an emergency, and even the national bank has lost the prestige under the new regulations, which once made its notes equal in public opinion to gold, it is impossible not to feel great apprehensions at the prospect of every recurring difficulty, while war especially must be regarded with the most sinister forebodings. We think, upon this showing, that we have a right to assume three points with regard to the Bank Charter Act. First, that it mainly affects the payment of wages, and the dealings of small traders and shopkeepers. Secondly, that large transactions carried on by houses of standing, who exert their credit, are exempted from its operations, when the goods they deal in require no wages to be paid. Thirdly, that the restriction of bankers' issues has a tendency to check investments in such descriptions of fixed capital as give employment to workmen.

Although the Act in question passed at a period of exaggerated speculation in railroads, yet it is difficult to conceive that its framers contemplated checking the mining and manufacturing enterprise of the country by the restrictions imposed. We are not so sure, considering the quarter whence the measure emanated, that an appreciation of circulating capital was not contemplated. Singularly enough, it seems to have been imagined that British industry had power to pay a tax thus imposed, without a depreciation of the value of shares in joint-stock and other speculations. But the point on which the framers of this Act were in the dark has undeceived both them and us, as to the tendency of the Act to repress mining and manufacturing. The vast sums employed profitably in banking, and whose sole use is to afford *an extraneous guarantee* to the validity of trading transactions, are necessarily vested in transferable securities, and such as find a ready sale. The crowd of small moneyowners, of minors, superannuated, and other parties incompetent, or unwilling, to undertake a better mode of raising a revenue than by investment in the funds, absorbs so large a portion of the national debt, while the formalities required by the Bank in transfers entail such trouble and publicity on transactions, that almost any other safe and *marketable* security is preferable for the banker, railway shares, when not overdone, and mining shares, when judgment and skill direct the enterprises, offered too many advantages not to be gladly sought as investments for sums which it was desirable to hold disposable without loss of interest. Hence our bankers were largely interested in the vast undertakings by which the condition of the working classes in this country has been, of late years, so much improved, and which, we trust, will soon again afford them the accustomed emoluments. They have now had abundant proof, that the two sources whence the banker's profits are drawn—viz., the returns from deposits invested, and the commission on current transactions, cannot be run against one another. The current transactions especially cannot be hampered with difficulties, except at the cost of depreciating in value the fixed capital which they keep in activity. To effect this is, fortunately, nobody's gain, and we sincerely trust, that amongst the many points to which public attention has been forcibly drawn by our recent crisis, the means of establishing the credit of our domestic industrial undertakings will take a prominent place. That it is quite unnecessary to have our mines, our factories, our railroads, and our shipping, as well as our wages' fund, in precarious dependence on the fluctuation in our supply of bullion, must be evident to all who have studied the matter with any care. The means by which this dependence may be averted must be devised by those interested in those properties, and the national counsellors and co-operators in the establishment of our domestic credit on a sound basis, are the bankers of each locality. A careful study of the history of each past crisis, an impartial appreciation of the part played in each by the various parties interested, and a large view of the now associated marts of the civilised world, are indispensible for a proper treatment of this all-important point.

We purpose concluding these notices with a few suggestions relative to means calculated to relieve the payment of wages from some existing difficulties in a future Number.

The Mines and Metals.

Through dark retreats pursue the winding ore,
Search Nature's depths, and view the boundless store:
The secret cause in tuneful numbers sing,
How metals first were fram'd, and whence they spring.
Whether the active sun, with chymic flames,
Through porous earth transmits his genial beams:
With heat impregnating the womb of night,
The offspring softens with his paternal light.
Or whether, urged by subterranean flames,
The earth ferments, and flows in liquid streams;
Purged from their dross, the nobler parts refine,
Receive new forms, and with fresh beauty shine.
Or whether by creation first they sprung—
When yet unpoised the world's great fabric hung,
Metals the basis of the earth were made—
The bars on which its fixed foundation 's laid,—
All second causes they disdain to own,
And from the Almighty's fiat sprung alone.

THE RAILWAY INTEREST.

Among other "interests" which bear a thriving appearance at the opening of the new year, "the railway interest" takes a foremost place. In November North-Western shares were, for a moment at 99—they now sell at 127, and are likely to be 140 before March arrives. And this is a fair sample of the whole.

As the calls slacken, prices will rise; as trade improves, prospects will brighten; and before Midsummer we may see a new season of prosperity; though hardly of insanity like that of 1845.

We trust that these evident signs of improvement will not be lost upon the Railway boards; and that some of the mischiefs which have latterly been creeping in, will be checked by renewed liberality on the part of the directors—liberality towards the public, and liberality towards their own servants. We suggest these things as friends to the railways, and as believing that *their* prosperity is an important element of the national prosperity. A Cobden style of finance has latterly been creeping in, and it will be well if the evident approach of better days shall cause that system to be quickly driven out again. Two or three different kinds of complaints have recently been heard, and we mention them with a view to their speedy removal. The best way to make railroads prosper, is, that the public should have no "grievances" to discuss.

One of these recent complaints is—that the old system of fees or douceurs to the porters and other servants employed, is creeping into the railway stations. It is said, that if a passenger has more luggage than he can carry in his hand, he will only secure prompt and useful services by a hint or a look promising reward. Nay, that a recourse to the scales, and a charge for overweight, are often suggested, if a readiness is not evinced to "tip handsomely" for passing. We trust that these practices are only *beginning*, and that they may be promptly put a stop to. For, assuredly, one of the circumstances which most gratified Englishmen in the railway system, was the freedom from petty extortions of this class, which was found to be secured in every railway station. To be thrown back into the usages of the coach system, by which a passenger often had to pay 12s. or 15s. in doceurs between London and Liverpool, would be indeed grievous to the lately-emancipated travelling population of England.

But the porters plead, we hear, in some cases, that the reduction of their wages forces them on these expedients. We know that a man, employed at a station in a midland county, said, not many weeks since, "Why, sir, here am I, the only porter at this station, where there ought to be *three*, or at least two. If you could look at my back, you would find it black from neck to hip, bruised with the boxes and heavy loads I am constantly carrying; and for this I get *eighteen shillings* per week."

We do not profess to judge between directors and their servants. We only remark, that this was the plea actually offered, not many weeks since; and we call the attention of all concerned to the proper regulation of such matters.

Another complaint which is unceasingly heard, relates to the advance of fares, especially on the unprofitable branches. And here again we would merely submit it to the directors, whether they are in all cases pursuing the course which is likely most to conduce to their own interest. It used to be considered part of the policy of a new railway, to "kill off" as quickly as possible all the coaches and other conveyances; so as to make the railway the *universal* conveyance. But now, in various directions, coaches are reviving, because they can run, profitably, at railway fares, or even lower. Within the last few days, we heard two gentlemen, from different towns, describing the effects of the recent augmentation of fares. One said, "I have thrice come by the railway (it is a branch line) within the last fortnight, being the *only* passenger in the train. But two omnibusses run to town daily, full of passengers. The return-ticket by the railway, second class, is 5s. The omnibusses run for 2s. 6d. each way. But *they* bring people from their own doors into the middle of town, while the railway leaves a long walk at both ends. Hence the omnibus is preferred. It is said that they talk of shutting up the railway."

Another said, "they have just raised our fares. A return-ticket is now 3s. 4d. An omnibus has started, which will bring me from door to door for 2s. In future I shall prefer to come this way."

We name these things openly, because we are convinced that it is better for the railway boards and for the public, that these things should be understood. To the directors we would say, "It may be wiser to be satisfied with five or six per cent. at present; and to trust to the increase of the population and of trade, and the growth of habits of travelling among the people, to raise your dividends in a few years to seven or eight per cent.; rather than by aiming at high dividends just now, to check that tide of public support which was so steadily flowing in your favour."

We have made these remarks in sincere friendship to the railways. We wish, as we have said, to see them prosper; for they cannot prosper apart from the general welfare. They have already done great service to the people of England; have vastly assisted internal trade; have promoted friendly intercourse; supplied great facilities fur healthful and pleasurable excursions; and, in short, have made the kingdom one vast metropolis. Let them proceed in the same course. Let them not "make haste to be rich;" but be content, for the present, with reasonable gains; and in this course they are sure to find their property one which is continually experiencing a steady improvement.

CONTRACT FOR COAL.—The East India Company have given notice, that they will be ready, on the 17th instant, to receive tenders for the supply of 3000 tons of coal, of either of the undermentioned sorts, to be delivered at Aden, on the southern coast of Arabia:—West Hartley, Carr's Hartley, Buddle's Hartley, Davison's West Hartley, Stewart's Wallsend Steam Coal, Hartlepool West Hartley, Glasgow Hard Splint Coal (screened), and Risca Black Vein Coal (handpicked). The contracts of the East India Company for coal are annually on the increase, which proves that, although there are plenty of coal-fields in India, it is of that quality that will not suit for steam navigation—giving out much sulphur and corrosive gases. The progress of railways in that vast portion of the British empire will, no doubt, cause a large demand for mixing with the native coal, and that of the Island of Borneo.

Original Correspondence.

JOINT-STOCK COLLIERY COMPANIES IN SOUTH WALES—No. I.

Sir,—In a country like South Wales, which possesses a coal-field covering the space of 1090 square miles, and of an average thickness, according to Mr. Marten, of 95 feet, it is not surprising that recourse should be had to joint-stock companies, for the purpose of developing such a source of national wealth. In concerns which require investments of large capitals, and in which the produce is of universal consumption, the application of the co-operative system appears at first sight as very feasible and expedient. Experience, however, has proved the fallacy of this supposition. Many attempts have been made, and have generally resulted in complete failures. Instead of realising large profits, they have, with few exceptions, entailed heavy losses on the unfortunate shareholders. These failures have not been owing to any peculiar depression in the value of coal, or to circumstances affecting all engaged in "the coal trade," as is shown by the circumstance of individual proprietors having conducted their collieries profitably during the same period that the joint-stock companies have lost money by theirs. That the investment of capital in collieries is generally a profitable one, and that many coalowners derive large incomes from such works, is too notorious to admit of a doubt upon the subject. To what cause, then, can we attribute the want of success which so generally results from enterprises of this kind when carried on by joint-stock companies? The solution of this problem, although attended with some difficulty, is too important and replete with practical benefits not to be attempted; and if the following reasons be thought insufficient and unsatisfactory, they may, probably, serve to direct the attention of your abler correspondents to the subject, and induce them to assign other and more probable causes for this anomaly. A scrutiny into the transactions of defunct companies, or an examination into the accounts of existing ones, show that the great and fundamental errors have been—first, a gross exaggeration of the prospective profits; and, secondly, the imprudent selection of a locality for their mining operations. There may be, and in most instances are, other causes conjointly influencing the prospects of the companies, but it will be seen that in the two errors mentioned, there is quite sufficient to render success impossible.

The great competition which exists in the coal trade utterly precludes the realisation of large profits, and, although some coalowners derive considerable incomes from it, yet it is from the large quantities sold,* constituting an aggregate of small profits, that their wealth accrues; and even to obtain these small profits, the greatest economy and most experienced skill is exercised in every department. These conditions are vitally essential to success in small as well as in great concerns; yet, from the nature and constitution of joint-stock companies, they are the very terms least observed, and most difficult of application. The formation of the company costs more in preliminary expenses than "the winning of the coal," and, when established and won, the salaries and expenses of the executive administration frequently exceed the sums paid as wages to the colliers. The costly machinery of directors, metropolitan and resident, law clerks, secretaries, and assistants, is ill adapted for the working of collieries, and, in most cases, does more evil than good. Few people would commend the prudence of a capitalist who invested his money in a business of which he was utterly ignorant, and of which he retained the control and management; yet the majority, if not the whole, of the directors of a joint-stock colliery are in this position, and, as a consequence, are unable to form correct opinions as to the value of a proposed purchase, the probable revenue to be derived from it, and the best mode of conducting the works.

Under such circumstances, it is not surprising that exorbitant prices and terms are given, improper localities selected, and exaggerated profits anticipated. Decisions on these important questions are among the earliest transactions of "the board," when it is uninstructed by experience and unrestrained by a grumbling constituency. It is on these acts, nevertheless, that the success or failure of the enterprise depends; for, however experience may modify the annual expenditure, "the bond" continues irrevocable. The number of officers, and the amount of remuneration to be paid to "the board" and its "staff," are at first generally on a liberal scale, and in some proportion to the exaggerated profits in perspective; but as stern reality gradually reveals the unpleasant truth, that the profits are insufficient to pay the interest of the debts incurred in the purchase, and of money borrowed for other purposes, the officers are diminished and the salaries are reduced. So infatuated are some of these "boards" with the golden dreams of their infancy, that they persist in believing them veritable, despite the evidences to the contrary, as shown in their ledger, and continue to pay dividends as if their prospective wealth was real and tangible. This delusion cannot, however, last very long. The day of reckoning must, and will, come; and those shareholders who escape further loss than what they have already paid, may congratulate themselves on their good fortune.

This is no imaginative picture—it is drawn, it may be, feebly and imperfectly; yet there are, doubtless, some persons still living whose reminiscences may enable them to trace in this rude sketch some resemblance to joint-stock companies with which they have been connected; nor are there wanting modern instances to illustrate its truth. It will generally be found, that these exaggerated notions of the profits, have been believed and acted upon from a ready credence having been given to the statements of the large quantity of coal which may be produced and sold, but which after experience has shown to be impossible. Had the board been well informed on these subjects, it would have paused before irrevocably committing the fortunes of the company on such statements, and instituted such inquiries as its reasonable doubts might have suggested. The possibility of producing the quantity named by the proposed means—and, if produced, could it readily be disposed of—are queries of such obvious importance, that one can scarcely imagine a directory so obtuse as not to have satisfied itself on these subjects; yet the history of many of these companies, bears ample evidence of the neglect of such ordinary means of ascertaining the true value of the estimates, on the faith of which the purchase is made.

The consequences of this imprudence, or incapacity, is irremediable; and, although ingenuity may be taxed for expedients to postpone the revelation of the ruin which has ensued, it is not the less certain. Under such circumstance, it is no uncommon thing for the board to propose an extension of the works, or some new scheme, involving a large additional expenditure, in the vain and forlorn hope of retrieving the past losses. If this be acceded to by the shareholders, the system is continued until their patience, or their pockets, or most probably both, are exhausted, and then the company dies a very natural death.

It is very clear that the early dissolutions of these companies (for they are generally ephemeral) are to be mainly attributed to exaggerated estimates of profits, yet there are other causes which conduce to the same end, and which deserve some notice.—J. Richardson, C.E.: *Neath, Jan.* 1

[To be continued in next week's Mining Journal.]

* It is said that Mr. Powell annually ships 300,000 tons at Cardiff, and in 1847 there was shipped from the Marquis of Londonderry's collieries, in the county of Durham, 560,471 tons.

THE LINE OF COMMUNICATION WITH THE SHORE IN SHIPWRECK.

Sir,—In the year 1817, I made my earliest experiments in reference to forming a line of communication between the stranded ship and the shore. My object was to obtain a simple substitute for Manby's mortar—available at all times, and of the most portable form. These original experiments were made on the sands near Mona Castle, in Mona's Isle, in which I was assisted by Captain Garbet, R.N., and other friends. More than 30 years have rolled away since the period in question; and a thousand times in that interval has it occupied my thoughts, and been the subject of countless experiments, realised at some hundreds of pounds' cost. My shipwreck arrow life-boat, &c., may be adduced in evidence; and I say this much in proof, that with me the question is "no new thing."

Capt. Manby's mortar has by no means realised the expectations tha were formed of it; but it was excellent in principle. If I mistake not Mr. Trengrouse was the first to propose the *rocket* as a substitute; but Mr. Dennett's rockets are infinitely superior to all others, as far as I can judge, and have been eminently successful in saving from shipwreck. The recent storms on the coast of Ireland, have supplied us with a very interesting example of their success; and it is devoutly to be wished, that Dennett's rockets were more generally diffused, and that Government would lend its aid for that purpose.

These rockets are admirably calculated to form an instantaneous line of communication between the ship and the shore, by projecting a line from the beach. A simple method, however, is still wanting for the transport of a line from the wreck to the beach on a lee shore. Capt. Dansey's kite, though ingenious, will but indifferently subserve the end. I need not observe, that a *lee shore* is the mariner's greatest danger—that which he dreads the most. Few vessels founder at sea comparatively with those which suffer shipwreck on a rocky coast or a lee shore. I have elsewhere proposed various plans as aids in shipwreck; the last, which has occupied my thoughts, is so simple, inexpensive, and manageable, as to bear with it the credentials of its own recommendation. I had, indeed, intended to have sent you a sketch of it; but perhaps a mere description may suffice. The machine is intended to be launched from the wreck, and carry with it a line to the shore. It consists of a hollow tin float, of a conical form, yet polygonal; its apex points to the shore. The cone is air-tight, and floats on its side, and the base of the cone is *concave*; it is weighted by a metallic rod below, carrying a poise at its lower terminus, to preserve its centre of gravity, &c., amid the oscillations of the waves. The cone is surmounted by a membrane of India-rubber, forming a miniature square sail; and this is supplied on its summit with a vane, moveable on a spindle, and formed of a hollow prism, to guide its movements direct to the shore. A line, formed of *coir* (the fibre of the cocoa-nut), is attached by a swivel movement to the centre of the base of the cone; and this line is supplied from on board. I have duly considered the experiments of Colonel Beaufoy, together with those of Mr. Scott Russell, on the floatage of bodies, and the resistance of the wave in reference to their motion.

I select the *coir* in preference to all other fibrous substances with which I am acquainted, because of its pre-eminent *strength* and *elasticity*, and its superior floatage. A line of small diameter will suffice to bring a rope attached to it on shore, and the latter of sufficient strength for the rescue of the crew. The cost is trifling, the means simple, the end to be attained of inestimable value. Providence may bless it as the messenger of protracted life, and its tiny sail thus gifted bears the message—"Thou shalt live, and not die."—J. Murray: *Portland-place, Hull, Jan.* 3.

Mr. STAITE'S ELECTRO-LIGHT.

Sir,—The more I consider Mr. Staite's electro-light, the more am I convinced of its surpassing value and high importance. It is impossible to overrate its excellence. It is, without a metaphor, luminous in every aspect in which it can be viewed. Professor Daniell's self-sustaining battery was a triumph; but the invention must vane before that of Mr. Staite, both in simplicity, as well as in power and economy, as far as the principle has been revealed. I am especially delighted by the ingenious application of the electro-magnetic principle of induction, which Mr. Staite has employed to regulate the movements and adjust the distance of the electrodes; when that principle was discovered, little did its author dream of this elegant application of its power.

When at Rome, in 1818, I told Signor Morrichini that he had shed a light upon light; and of Franklin it was said, "*Eripuit cælo fulmeri*"—so of Mr. Staite it may be predicated, that he has seized a sunbeam—for even it has at length obeyed the magic spell of Science. Every reflecting mind at once recognises the importance of the discovery, and its pre-eminent applicability for the purposes of *public* illumination, as in the case of lighting up towns, public buildings, railways, and lighthouses, and I may add to these *yet another*—the illumination of *steamers* at sea: collision would thus be all but impossible. Some have, it is true, doubted its *economy*; but we have Mr. Staite's assurance that, in this respect too, it is all that could be wished for. Nor can I see the slightest ground for any scepticism as to its eventual introduction into the domestic economy of our dwellings. All this, and much more, may be safely predicated of it. We have almost ceased to marvel at the miracles of science.

I have already referred to the unrivalled *purity* of the electro-light, for its counterpart is the solar ray; but there is yet this to be superadded—there is "healing in its wing," in virtue of its *actinism*—so that there is not only no deterioration, chemically considered; but when we are illuminated by the sunbeam of electricity, we enjoy that which gives life to the atmosphere, and "heals its sickness"—for, beyond all controversy, solar light is its animus, or "vital principle."

I made many experiments, some years ago, on the deflagration of metallic foils, and ignition of wires by voltaic electricity. I found then, when gold and silver leaf, tin, copper, zinc, and platinum foils were deflagrated in the atmosphere, tinge of colour, &c., manifested a state of oxidation; but I have also ignited these wires (iron and platinum), and deflagrated these foils equally well in water, alcohol, ether, sulphuret of carbon, also in hydrogen, nitrogen, carbonic acid gas, &c., and in *vacuo*, when the metals seemed to suffer no apparant chemical change, simply manifesting a resolution unto minute *mechanical* division.

I cannot doubt but that the electric light having been at length *fixed*, or become continuous and permanent, we shall be able soon to unravel the mysteries of light and its wonderful phenomena, among which Dr. Faraday's extraordinary discovery of the relation of light to magnetism, and of their reciprocal affinities, hold a distinguished and prominent place.

When the uniting platinum wire is ignited by voltaic electricity, and the flame of a spirit lamp is employed to raise the temperature of one portion of it, the remaining part *becomes extinct*; and, on the other hand, when a part of the ignited wire is *cooled* by immersion in olive oil, the remainder of the wire immediately rises to a more exalted incandescence. I am not sure that, in the present state of our knowledge, these phenomena can be satisfactorily solved.

Before the sustaining batteries of Mullins, Daniell, Smee, and Glover, were introduced, I was in the habit of employing Dr. Wollaston's triads, or zinc plates with double coppers, in porcelain cells; and I have used 10 or 12 of these batteries at once, which yielded me a considerable power. I employed, in my experiments, diluted *nitrous acid* as the means of excitation; and have found that I invariably enhanced the power of these batteries by previously *heating* the plates in an oven, or a sand bath, before immersion: but I may return to this curious question.

Portland-place, Hull, Jan. 3. J. Murray.

THE ELECTRIC LIGHT.

Respected Friend,—A very interesting lecture was delivered last night, at the Liverpool Mechanics' Institution, by J. H. Pepper, on the electric light, during which numerous experiments were made, to prove the applicability of voltaic electricity to illuminating purposes; but as the apparatus of the patentees, Staite and Petrie, was not used—they having, it appears, refused to allow its present introduction in these northern regions—there was no opportunity of judging whether it is possible to sustain the light during an indefinite length of time. The light exhibited required adjusting every five minutes, owing, as the lecturer stated, to the difficulty in keeping the charcoal points in contact, as the slightest motion tends to separate them, which, of course, arrests the flow of the electric fluid, and instantaneously extinguishes the light. This inconvenience is obviated by the patentees, by means of clock-work machinery brought in contact with the wires, by which they suppose the tendency of the points to separate will be overcome—so that the question as to the practicability is entirely mechanical; still there is no doubt but it is a question which is yet to be solved—that is, as regards its superseding gas. Another question is as regards the economy; in using zinc in the batteries, on a large scale, considerable expense is incurred, as the sulphate of zinc produced is of little or no value, and the lecturer appeared to entertain but slight hopes of its being superseded, as a much larger quantity of any other metal would be required to produce the same current of electricity; while the product of most other metals would be equally valueless. Considering these, and other obstacles, it is evident that much remains to be done, in order to bring this truly wonderful light into universal use; but, in the meantime, it may be of use for lighthouses, and other localities, where brilliancy of light is of more importance than cheapness.

Liverpool, 1st mo. 3. John De la Haye.

IMPROVEMENTS IN THE STEAM-ENGINE.

Sir,—Nothing could have been further from my intention, when penning the remarks alluded to by your correspondent, Mr. T. Craddock, in last week's *Mining Journal*, than to disparage the merits of his inventions, or question their practicability. That steam may be condensed at *this* season of the year, without the use of water, no one in his senses will doubt; and probably it may be possible at *any* season of the year, if sufficient surface is exposed (and certainly the motion of the condenser is favourable); but, whether practical or not, *weight* is necessary for the "grip," and this weight has associated with it a great variety of evils, which it would be foreign to my present purpose to enter into, feeling assured that a gentleman of Mr. Craddock's discernment does not need to have them pointed out to him. In regard to the economy of high-pressure steam, there cannot be two opinions; but in regard to the *safety*, there may very reasonably be some difference; but the pressure Mr. C. speaks of is, if I am rightly informed, commonly employed in locomotives, and, if it is safe in locomotives, I can see no reason why it should not be so in other engines. In regard to *going to America and back* with the fuel that is now consumed in going there, I believe that the time is not far distant when it will not require one-fourth of the fuel at present consumed; and I also believe that the valuable information Mr. Craddock has given in his *Lectures on the Chemistry of the Steam-engine* will do much towards the accomplishment of this desideratum. I am rather back-handed in complimenting my instructors; but, seeing that Mr. Craddock appears to think that his labours are not appreciated, I must be excused on this occasion.—J. Weston: *Portland-town, Jan.* 4.

STEAM-CARRIAGES ON COMMON ROADS.

Sir,—I have no doubt that with such improvements as it is possible to introduce in the construction of steam-carriages for common roads, many of the difficulties hitherto found to exist may be overcome; nor have I much doubt that while railway companies retain their present prices, the speculation may be made a profitable one; but should they think proper to lower their fares, which sooner than lose their customers they would be certain to do, then it might be questionable whether the common road steam-carriage could compete with them; but, probably, it is the last vestige of stage-coaches that is to be annihilated; in that case there is certainly a better chance of success, and, probably, it will be the means of inducing a thorough revision of the present railway system sooner than might otherwise be done. Perhaps some may fancy that the present is not susceptible of further improvement, that it will last for ever; let those who think so recollect that the railway is only about 25 years old—mere infancy for such a mighty being—not half the age of the steam-engine, which everybody who has made the acquaintance knows, is as far off finality as my Lord John Russell, who once thought there was such a thing, but who finds it necessary to "move on," or be moved. J. Weston.

Portland Town, Jan. 4.

THE CORNWALL RAILWAYS.

Sir,—"A Reader," in his letter on the Cornwall Railways last week, takes occasion to speak rather strongly of the inefficiency of Mr. R. Thomas, of Falmouth, as a civil engineer, and quotes as his example the engineering on the Redruth and Hayle Railway.

Now, Sir, I think, in common honesty to Mr. Thomas, "A Reader" might have told the whole truth of the matter; and, as he pretends to know so much, he must have known that the Hayle Railway, as it is, is more a specimen of the engineering of the committee than of the engineer. The line, as Mr. Thomas laid it out and wished to have constructed, did nowhere exceed 1 in 50, which for a horse-road, as was then intended, was very good; but the committee forced the present line upon him, and which was never intended for a passenger line.

As to the "laying out" of the Central Line, when under Mr. Thomas's directions. I shall only say, that precisely the same line as he surveyed through Cornwall was afterwards surveyed under the direction of Mr. Locke, who said it was the best line to be had in the county, and he is, I fancy, better able to give an opinion on engineering than "A Reader." I am sorry to have to trouble you with this, but by inserting it in your next publication you will oblige—Another Reader: *January* 2.

LECTURES ON AGRICULTURAL CHEMISTRY.

Sir,—Had Mr. De la Haye read my letter and his own more carefully, and examined the subject more in detail, his reply would not have been exposed in print. Such inconsistent jumble of words, and contradictory arguments, are not often seen, in the same letter, from a person pretending to know anything of practical science applied to the arts. If the answer in question is a specimen of the arguments used to support the aërial doctrine, I venture to state, that it will soon come to the ground. Your readers will observe, that I never stated that plants could not live on carbon; on the contrary, I find it necessary to saturate the soil with carbonaceous matter for the nourishment of the plants. The question is, which end absorbs the carbon—the roots or the leaves? I do not know what effect the smoke has on the *greens* of Liverpool; in Cornwall and Devon, at least, such vapour cannot be swallowed, much less digested, in any shape or form whatever. The age of taking certain old dogmas for granted, and bringing forward *pretended* experiments, is passing away. Thanks to our enlightened times and rapid progress, and dissemination of *scientific truths* amongst the million, nothing short of a clear and unequivocal demonstration will satisfy practical men of the present day. I have too high an opinion of your readers to deem it requisite to comment much on Mr. De la Haye's reply. I was pleased with "J. L.'s" letter, in your Journal of the 23d December. It was quite to the point; and I hope he will favour us with a little more information on this interesting question, founded, of course, on his own experience. Mr. De la Haye's acumen is well displayed in the remark he has made on "J. L.'s" experiments—viz.: "J. L." says, that "some plants will thrive in an atmosphere of hydrogen," which I believe is equivalent to placing them in a vacuum. "Nothing (says Mr. De la Haye) could be more to the point to prove that the plants are supplied with organic matter by the leaves; for, if the leaves were of use simply to exhale the superfluous gases, the carbonic acid gas would aid, rather than retard, the process, by attracting the gases to combine with it." Rich idea! pray, where did the above carbonic acid gas come from? Surely not from vacuum, as it is called. Pardon me, readers, and you, Mr. Editor, for occupying so much time and space in your valuable Journal, in noticing so vague and so incongruous a reply. A Mine Captain.

St. Day, Gwennap, Jan. 2.

LECTURES ON AGRICULTURAL CHEMISTRY.

Sir,—I do not think Dr. Ryan will thank your Liverpool correspondent for his somewhat incoherent and hasty defence of the leaf-feeding doctrine. It does not speak much in favour of the erudition of the disciples. I perfectly agree in the views of the "Mining Captain;" let him attend well to the composition of his soil and drainage, and to return back so much of the crude and unavailable part of the crop into the soil as he can, to avoid too much exhaustion. Those who will put any faith on the supply of carbon from the atmosphere, *brick-dust*, or roasted and non-consuming soil, simply saturated with *pure* water—*i. e.*, oxygen and hydrogen, without soluble carbon, will find to their cost a crop, *if any*, of stunted plants suffering from anasarca (dropsy), and this disease will be propagated by the family, and, consequently, not only valueless as food, but dangerous to animals as well as to the health of the future crops. Even potatoes, least diseased, should, when replanted, be put into slightly inclined ground in preference to level plains, so as to be less subject to too great a saturation in the soil. Potatoes having once been much affected ought not to be replanted; and those suspected should, as already stated, be planted in drier ground, and in larger tubers, and where the peroxide of iron is somewhat predominant as a colouring matter in the soil. I should like to see some observations from your lucid correspondent, Dr. Murray, on this subject. He very justly remarks, that an excess of the salts of iron is injurious to the sugar cane, and that peat charcoal is eminently fitted for the requirements of vegetable life. Sometimes we find it necessary to plant together two distinct species of different degress of absorbing powers, to render the soil suitable to each variety. The chocolate plant requires succulent companions to ensure its being brought to a state of maturity. As regards the atmosphere, we find both by experience and *direct* experiment, that pure mixture of oxygen and nitrogen with light, are the essential external elements requisite for the health of plants. We find also, by the aid of very careful and extensive microscopical examination of the action in the cells, that hydrogen performs a most important part in vegetable life. The roots absorb from the moisture in the soil all the nourishing elements of the plants. The water is decomposed at or near the roots, and the hydrogen in excess ascends from cell to cell, the process of liquification goes on, a portion of the sap is forced out by means of the medullary rays to form the bark; whilst the hydrogen, and other light gases, arrive at the leaf enveloped in bubbles of water at the mouth of the individual pores; these drop or burst, and the gases are evolved. The magnitude and the progressive development of the plant depends on the superficial extent of the evolving powers of the leaves. There is no such thing as a return of the sap from the leaves downwards to the roots. If we cut off a twig, we check the evolving power of the fibres constituting that twig—it is like taking off the negative plate of an active battery; it stops the absorbing and decomposing functions of the part of the roots connected with the pores of that twig, and the action is partially suspended, until new buds are forced out again below the injured part, by means of the radial exhaling powers of the bark. Such are the phenomena in all plants, trees, &c.; and each extremity—*i. e.*, roots and leaves—after having once been formed, never change their respective functions during the existence of vegetable life. J. L.

Bathwick, Jan. 4.

WEARDALE IRON ORE.

SIR,—"A Miner" has written you a letter to misrepresent what I said last week, in correction of an assertion, that the Derwent Iron-Works had discontinued using Weardale iron ore, from inability to extract the iron. I therein simply stated a fact—giving the true reason for having discontinued using that ore, after the experiment of the 7000 tons was completed, which was done at the instance of a proprietor in Weardale, and partly, indeed, before the full discovery and development of a better and cheaper ore, closer at hand. There was no depreciation of Weardale ores intended; on the contrary, I believe ores of good quality are to be found in plentiful mixture with inferior sorts; and I understand my friend, Mr. C. Attwood, has made very fine iron from selections of these ores; but which, considering the great chemical knowledge and known talent of that gentleman, may have been done without justifying a conclusion, that the ores generally of the Weardale district (of so diversified a nature, and so commixed with many noxious substances, as most part of them are) are of that practically good quality to be put in competition with other regular and known stones, for the use of those who have to make good and *cheap* iron. I shall be glad in the extreme, however, to be assured that so valuable a deposit as the "Miner" asserts is so near us; and, in the meantime, as *miners* are not in the habit of writing in the classical style of the practised hand under that signature in your last Number, it cannot be doubted that the author is a gentleman—probably, a proprietor—in Weardale, desirous of having the value of his ores proved; and, if he will send me a supply, I will engage to try it, and faithfully report thereon. To prevent failure from "unskilfulness" or "ignorance," or "want of observation," I shall be guided by the miner's advice in smelting; but as I am a practical maker of bars of iron on a large scale, and not a theoretical experimentalist on a small one, as the "Miner" describes himself to be, I shall not be satisfied unless I find that the quality of cheapness, when put into the bar, rests with the Weardale ore—that being the only test of superiority in iron-making. W. CARGILL.

Shotley-bridge, Durham, Jan. 2.

WEARDALE—"RYDER."

SIR,—The spathose iron ore, called the "ryder" in Weardale, is that description of ore from which nearly all steel is made in Germany; it is there called steelstone (*Stahlstein*). The pig obtained from it breaks with a large crystalline fracture, and is unfit for castings; but is refined, or *puddled*, in charcoal fineries (the tuyers set nearly horizontal), and forged under hammers into rough bars; these puddled bars are fagotted together, and drawn out into bar-steel, in which state it is used for making edge tools, saws, &c., &c. Small furnaces, of only 5 to 6 ft. bosh, are generally used for smelting spathose ore, using charcoal as a fuel, and requiring no limestone as flux. There is no reason why steel should not be made direct from the ore at Weardale, as it is in Siegthal. I think it would be found more easy to refine the cast-pig in a reverberatory furnace, in the same manner as pig or black copper is refined—both metals requiring only a slight addition of carbon to cause malleability. The low price at which steel might thus be made in England may, perhaps, be worth the attention of those in the trade.—E. K.: *Dec.* 27.

CARBON AND IRON.

SIR,—In reply to Mr. David Mushet, I am not aware of the composition of the substance termed *plumbago*, into which the guns of the *Royal George* were said to be converted; and I do not think it was ever subjected to chemical analysis. It was most likely a compound of iron and carbon, in unknown proportions.—J. MITCHELL: *Hawley-rd., Kentish Town, Dec.* 18.

THE MINER'S INTEREST—SMELTING.

SIR,—That there is room for the safe and advantageous employ of capital by a properly-conducted new copper smelting establishment, is beyond question; but the true interest of the mine proprietor, the mine shareholder, or the miner, is *not best consulted* by the promotion of another *wasting furnace*. If a company be formed, with only such or similar arrangements as the existing establishments, it is all but certain, that whatever may be its professed object and onset liberality, it will naturally seek its own interests by the exercise of more or less judgment and tact in securing the largest profit; and as unexpected contingencies may be consequent upon the competition and isolation of a company having but the one resource, or only the usual routine of the furnace, there is no kind of security that it may not soon coalesce with, or fall into, the arrangements of the existing companies, who, mangre their waste, manage to obtain considerable profits. It seems needless to waste thought in disputes and discussions as to the precise extent of the profits, since they have the unquestionable right to make them as large as they can, by buying cheaply and selling dearly; and so long as *the mine proprietors and shareholders* are content to remain in ignorance of the nature of the mineral they produce, and are so indifferent as to take no proper means of ascertaining its contents and value, and also so careless as to leave its washing and preparation to such agents as are either too ignorant or too obstinate to teach themselves, or to be taught, the mine shareholder ought not to unjustly reproach the present smelters (who work with a more than comparative faultiness and waste, considering the means they have, or ought to have, for preventing it) for getting what legitimate profit they can. If they have resorted to unfair means, or deception, the mine owners and the shareholders have the remedy in their own hands. Let them subscribe and form an establishment, which shall provide the best chemical and smelting means for *inducing the mine captains and tributers to discriminate the nature and components of the ore*, and to take proper care that the "*ore dressers*" also have something like a reasonable comprehension and knowledge of their calling, so as to properly separate, arrange, and dress the mineral, and save all the metalliferous components, instead of throwing away the "mundics," without examination, and washing away the various pulverulent and investing oxides, sulphates, arseniates, &c., contained in the gossany, cellular, and vesicular ores. Let them be arranged and prepared in such a way, that the present smelting establishment may find its interest in purchasing the mineral at a fair price—not merely for its copper, but for *all* its other metallic contents.

One such establishment will do more good than a score conducted like the present. The new company will have ample field for large profits, and by it of many of the present, and scores of the suspended, mines will be brought into good working condition, and be profitably sustained, with great benefit to the mine proprietors, the shareholders, the miners, and the mercantile, trading, and other interests participating in the various and great advantages derivable from active mine operations. That there may be no mistake, permit me to still further to encroach on your space, and point out the mutual losses sustained by the mine shareholder and the smelter.

Only a comparative few of the mine captains are able to take further trouble than to examine the lode for copper. If they see green carbonate, red oxide, crystallised, tile ore, massive grey copper, or the yellow ore, they know it is copper ore; but let the veinstuff contain a large quantity of arsenical or other pyrites ores, with more or less silver, cobalt, or nickel, &c., it is all "mundic." If he perceive as much yellow copper ore among the lode stuff as he thinks will "pay for raising" as copper ore, a sample is taken and pounded together, and sent "to be tried for copper." If a low assay be reported, it is wholly neglected until some adventurous tributer has further examined the lode, and obtained "a pitch" at a very high rate. In breaking the ore from the lode, being what is termed "a poor pitch," the mine captains generally permit the tributers to work the pitch how they like, and do as they choose with what they break; the consequence is that the whole lode stuff broken is mixed together and sent up to the "dresser," who knows no more about the components and nature of the mineral than the mine captain or the tributers; and, therefore, by his dressing the accompanying "mundics," the soluble mineral, the pulvurulent oxides, &c., are thrown aside, or washed away, and then the remaining hard mineral containing the most copper, and some of the retaining silver, &c., is "bucked up," and dressed for ticketting.

Perhaps it is not going beyond the fact in saying, that of 100,000 samples tried by upwards of 20 "assayers," on behalf of the tributers, the mine shareholders, and the different copper companies, not one troubles himself about any gold, silver, cobalt, nickel, or other matter, than the quantity of fine copper which is to be obtained by the usual process of the existing smelting companies. It is simply sold, bought, and burnt as poor copper ore, and fetches at the ticketting only from 1*l.* 10*s.* to 2*l.* per ton, although it may be worth twice, or more than twentyfold, that sum for other mineral, and yet not be the richest and most valuable produce of the lode. Thus, through the mineralogical and chemical deficiency of the mine captains, and the superintending arrangements of the existing copper smelting establishments, all the other metallic components of the ore, and also of all the veinstuff itself, are wholly wasted and rendered valueless to the smelter, as well as to the mine shareholders. This is as disgraceful as vexatious to us miners, but is not the only loss the mine shareholders sustains, as there is also great loss by the careless breakage of the ore, and the indiscrimination of the captains, tributers, and dressers in the raising and preparation of it, and the extra dressing cost attaching to that portion of mineral sent into the market.

It must also be remembered that, after all losses and wastes, the present companies deduct 2*l.* 15*s.* per ton, which, with proper arrangements, they can well afford to give up to the mine shareholder, together with half the value of the sulphur, and yet make larger profit than they now do.

If mine shareholders, and the lords of the mines and mineral properties, will but support a properly-arranged new smelting company, they will soon find the mineral contents of the veinstuff averaging much beyond its present value.—GEORGE ABBOTT: *Charles-street, Jan.* 3.

THE SCOTCH IRON TRADE.

TO THE EDITOR OF THE MINING JOURNAL.

SIR,—As compared with 1847, our tables exhibit, in respect of pig-iron, an increase in the production of 60,000 tons; in the stock of 10,000 tons; and in the exports, to United States, of 45,242 tons; while the shipments have decreased to British America 2029 tons and to ports in Europe 25,638 tons. Consequent on the foundry consumption and shipments at this season being on a very light scale, together with the existing large production, the stock of pig-iron will, in all probability, accumulate for some time to come. It may be worthy of remark, that there has lately been a considerable quantity shipped, and is now lying for sale at Runcorn and other points in Lancashire, of which we take no notice in the annexed estimate. In 1847 the quantity used for local malleable iron purposes was 124,800 tons, whereas, this year, it has been exceeded by 31,200 tons. The progressive extension of this branch of the Scotch iron trade has exercised an important influence in keeping the stock of pig-iron low, while the moderate price of bars has induced large foreign and home orders which formerly were executed in England and Wales. In 1847 the export of Scotch manufactured iron to foreign ports was 3520 tons; and in 1848 it amounted to 10,390 tons.

Considering the probable continuance of the American demand for pig-iron—the settlement of political affairs on the continent, and the evident symptoms of improvement in the commerce of this country, it does not appear unreasonable to anticipate for this important branch of national industry some participation in the benefit of a revival in trade; and, it is to be hoped, this may be the effect of legitimate demand, and not the result of speculation. During the present year speculation in pig-iron has been on an exceedingly limited scale—transactions of the kind having more the character of jobbing than of speculation. The extreme variation in price throughout the year has been about 12*s.* 6*d.* per ton. Since the 21st inst. there has been a rather extensive business done here in Scotch pig-iron; the price has advanced during the interval about 2*s.* to 2*s.* 6*d.* per ton; and the market closes firm with buyers of mixed numbers at 44*s.* 6*d.* per ton—net cash, free on board. Manufactured iron continues steady—bars at 5*l.* 5*s.* to 5*l.* 15*s.*; nail rods at 6*l.* 10*s.*; plates and sheets 7*l.* 10*s.* to 8*l.*—4 per cent. discount for cash.

Pig-Iron Works and Furnaces in Scotland.

WORKS IN OPERATION.

Works.	In Blast.	Out of Blast.	Total.
Gartsherrie	16	0	16
Dundyvan	9	0	9
Clyde	5	2	7
Govan	4	2	6
Calder	5	3	8
Langloan	6	0	6
Carnbroe	4	2	6
Glengarnock	7	2	9
Summerlee	6	0	6
Monkland	9	0	9
Coltness	5	1	6
Omoa	3	1	4
Shotts	3	1	4
Castlehill	0	3	3
Blair	0	5	5
Muirkirk	2	2	4
Garscube	0	2	2
Carron	2	3	5
Devon	1	2	3
Forth	4	1	5
Kinniel	4	0	4
Lugar	3	1	4
Eglinton	2	2	4
Lochgelly	2	0	2
Dalmellington	1	1	2
	103	36	139
Works now Erecting and nearly Ready.			
Portland	0	0	2
Nithsdale	0	0	3
	0	0	5
Total furnaces	103	36	144

Shipped Foreign in 1848.

From Scotland	*Tons* 95,690	
Ireland	2,883	
England	63,578	162,151
Coastwise		227,833
Total	*Tons*	389,984

Comparative View of Exports, Stocks, Production, and Prices—1846-7-8.

EXPORTS.

	1848.	1847.	1846.
France *Tons*	5859	24836	35567
Jersey and Guernsey	329	95	268
Germany	41417	50857	48766
Denmark, Sweden, & Norway	7054	3416	2580
Russia	1220	962	—
Turkey and Egypt	911	531	260
Italy and Austria	4642	6226	5481
Spain	1444	1703	2703
Portugal	535	283	435
South America	1980	1343	538
West Indies	161	215	170
New South Wales	641	1458	607
British America	4198	6327	7307
United States	90235	44993	13918
China	575	175	—
East Indies	950	—	—
Total *Tons*	162,151	143,460	119,100

STOCKS AND PRODUCTION.

	Stock.	Production.
31st Dec., 1846 *Tons*	145,000	580,000
„ 1847	90,000	540,000
Decrease in 1847	55,000	40,000
31st Dec., 1848	100,000	600,000
„ 1847	90,000	540,000
Increase in 1848	10,000	60,000

PRICE.

	1846.	1847.	1848.
January	£4 0 0	£3 13 4	£2 8 4
February	3 17 6	3 13 4	2 10 0
March	3 10 0	3 11 1	2 4 4
April	3 6 0	3 10 8	2 1 9
May	3 10 0	3 5 3	2 2 3
June	3 8 0	3 5 0	2 3 0
July	3 10 0	3 8 1	2 5 6
August	3 15 0	3 7 9	2 5 3
September	3 13 6	3 6 0	2 5 3
October	3 9 6	2 19 10	2 3 0
November	3 9 0	2 11 0	2 2 0
December	3 12 6	2 7 6	2 2 4
1845.	AVERAGES.		
£3 16 0	£3 11 8	£3 5 0	£2 4 5

	1845.	1846.	1847.	1848.
Malleable iron produced in Scotland *Tons*	85,000	45,000	60,000	90,000

Stock.

Stock on hand 31st Dec., 1847 *Tons*	90,000
Stock this date in stores and makers' hands	100,000
Increase in 1848 *Tons*	10,000
Furnaces in blast—1st June, 93; 1st August, 101; 31st December, 103.	
Production in 1848 *Tons*	600,000
Add stock 31st Dec., 1847	90,000
	690,000
Exports as above *Tons*	389,984
Stock this date	100,000
Consumed for malleable iron purposes in 1848	156,000—645,984
Leaving for local foundry and inland consumption in 1848	44,016

Glasgow, Dec. 30. P. & H. FERGUSON & RHIND.

A number of workmen in the Marquis of Londonderry's collieries, held a meeting on Saturday evening last, in a large room fitted up for the purpose at Chilton Moor, in order to establish a Mechanics' Institute. The meeting was addressed by Mr. William Longstaff, viewer, and Mr. John Thomas, engineer, and was conducted in a most lively and interesting manner. Before the close a list of members' names, numbering upwards of 100, was read over, and officers were appointed for the government of the institute.—*Newcastle Journal.*

BAD LEGS OF FOURTEEN YEARS' DURATION CURED BY HOLLOWAY'S OINTMENT AND PILLS.—Mrs. Priscilla Waters, of Pentney, near Lynn, had been a dreadful sufferer for upwards of 14 years with bad legs, which several of the faculty had tried to cure, but without success; her digestion was much impaired, and at times she was quite incapable of attending to her household affairs. As the medicines which she had been taking afforded her no relief, she was recommended to try Holloway's pills and ointment, by the use of which she was completely cured, and for more than 12 months past she has been able to attend to her domestic duties, and could if necessary walk 10 or 20 miles with ease.—Sold by all druggists, and at Professor Holloway's establishment, 244, Strand.

IMPROVEMENTS IN PRODUCING LIGHT.

[Specification of patent granted to Henry Archer, of Shaftesbury-terrace, Pimlico, Middlesex, for improvements in matches, and in the production of light, and in the apparatus to be used therewith.]

This invention is divided into five parts, the first of which relates to matches to be used as tapers for sealing letters, &c., and consists simply in the use of a match taper, tipped with some inflammable composition, such as is commonly used for these purposes, inserted into a short and thick taper, formed either conical or cylindrical, having at bottom a piece of metal, or other material, suitable for preventing the wax, or composition, from running about when the match is nearly burned out, and causing the whole to readily stand on its base. The match-taper may, however, be merely inserted at foot in a small block of lead, the object being to maintain the match in an upright position during the process of sealing.

The *second* part of the invention has reference to the burning of hydrocarbons for producing light, by mixing them with other liquids, in order to prevent their smoking, or giving off portions of unconsumed carbon; for which purpose it is proposed to mix one part by measure of ordinary camphine, or coal-tar naphtha, with two parts by measure of wood naphtha, or pyroxilic spirit, whereby, it is stated, an inflammable liquid is produced, that will burn with great brilliancy, and will not smoke, like the pure camphine. The patentee, however, remarks, that he does not confine himself to these particular proportions, as he sometimes uses three parts of pyroxilic spirit to one of coal-tar naphtha, or camphine, and sometimes equal quantities of both; but, for ordinary purposes, he prefers the proportions first mentioned.

The *third* part of this invention has reference to the manufacture of night-lights, which merely consists in the use of a thin metal case, for holding the inflammable liquid, such, for instance, as the collapsible tube, patented by Mr. Rand, into which the wick is to be inserted, the top being covered in around it. For this purpose the match-wick, stepped in lead, as before described, may be used. This method, it is stated, may be adapted for portable lamps.

The *fourth* part of the invention relates to pressure lamps, actuated by weights or springs, so as to cause the oil or inflammable liquid to be pressed up to and supply the wick. Within an outer casing, or cylinder, a flexible bag is placed, having at top a metal plate or cap, with an aperture for the wick, and at bottom a plate, but without the aperture; one end of a coiled spring being attached to this plate, the other end having an abutment within the lower part of the outer casing. It is evident that the flexible bag, being filled with oil, will press against the spring and collapse it; but this, as the oil burns away, will press up and collapse the bag, so as to keep the level of the oil up to the wick. In order to trim this lamp, the cap, or top plate of the bag, is to be unscrewed; and, to prevent the bag being pushed out of its place, there is a cord attached to the bottom plate, which is secured at the lower end to a small roller at bottom of the outer casing; this roller, being turned down, pulls the cord, and thereby counterbalances the spring.

The last, or *fifth*, part of the invention relates to ornamental chimneys, or shades of glass, for lamps and gas burners, and consists in corrugating them obliquely or horizontally, so as to give a pretty effect to the flame.

The patentee claims—1. Making matches, as shown and described, so as to cause them to stand in a vertical position with facility.—2. Preparing and mixing camphine as described.—3. Manufacturing night-lights, as shown and described.—4. The improvements in pressure lamps, effected by the use of a flexible bag or case, supplying the oil or inflamable liquid, by means of pressure exerted externally.—5. Corrugating the glass chimneys or shades for lamps or gas burners, either obliquely or horizontally.

Patent-office and Designs Registry, 210, Strand, Jan. 2.

REMINGTON'S ÆRIAL BRIDGE.

In the *Mining Journal* of December 2, we inserted a letter which had been addressed by Mr. J. R. Remington to a friend in the United States, and published in *Hunt's Merchants' Magazine*. It will be recollected, that the statements made by Mr. Remington were of the most extravagant nature, detailing a series of hardships and persecutions more resembling a tale in some romance than anything that could happen in civilized society, and which we were not sparing in censuring at the time of its publication. Our view, it appears, was a correct one; and that we were justified in our remarks, the following letter from Mr. Tyler, the proprietor of the Surrey Zoological Gardens, fully proves. In the Journal of the 16th December, we referred to a communication we had received from Mr. Remington, in which he complained of our "very harsh remarks," and stating that the letter was addressed to a friend, and not intended for publication. The position Mr. Remington has placed himself in by writing such a letter, is very lamentable; while, as we have before observed, it is to be regretted that his friends should have been so imprudent as to publish, as true, so ridiculous a series of improbabilities.

SIR,—My attention has been called to a letter in your publication of the 2nd inst., written by Mr. J. R. Remington, and copied from *Hunt's Merchants' Magazine*. Will you have the kindness to give it a flat contradiction—it is a tissue of falsehoods from beginning to end.

My first introduction to Mr. Remington was to inspect a new light for the drawing-room table, which, he said, he had invented. Upon his telling me that he had no funds to complete the apparatus, I, in concert with Mr. H. Jones, gas-fitter, of Rose-street, Covent-garden, guaranteed to Mr. Ladd the payment of 10*l.* If successful, all expenses of patent and bringing it before the public were to be paid by Mr. Jones and myself, Mr. Remington reserving one half. This turned out a complete failure.

He also had 5*l.* to redeem a one-wheel velocipede, which, after some weeks' gratuitous aid of my carpenters and blacksmith, also proved a failure.

The bridge, he said, having been repeatedly erected in America, he attached no importance to. All he wanted was an opportunity to bring his name before the public; for he had other inventions he relied on to remunerate himself.

During the whole time he was superintending the construction of the bridge, Mr. Remington boarded and lodged at Mr. Ladd's, mathematical instrument maker, Amelia-street, Penton-place, to whom I paid 28*l.* for such board and lodging, and other expenses, which sum I never asked him for. In addition to which I hold a note of hand for 19*l.* for money advanced. He never slept in the Gardens! He never partook of the carpenters' meals! He dined frequently at my table! He had free access to the Gardens whenever he chose! And I should much like to posess the instrument by which a Yankee bound himself to pay 10*l.* for the advance of a shilling!

In place of the bridge costing 8*l.*, it cost 38*l.* odd! Prince Albert was not present at the opening! And the immense woodcuts and type are equally apocryphal!

Previous to lodging at Mr. Ladd's, I understood that Mr. Remington bearded and lodged at an hotel in Leicester-square for *four months!* He told me he had been residing at Morley's, Charing-cross.

I am sure your sense of justice will induce you to give this insertion; and I much regret that any one, of any country, should assert such unblushing falsehoods.—WILLIAM TYLER. *Royal Surrey Zoological Gardens.*

M'NAUGHT'S PATENT DOUBLE CYLINDER ENGINE.—Now that the prejudice against the use of high-pressure steam has died a natural death, the attention of engineers has been very generally directed to the most economical application of the expansive system, wherever the price of coal renders it advisable. In some cases, where a low-pressure engine had to be altered to carry high-pressure steam, the old cylinder has been taken out, and a new pair of high and low-pressure cylinders put in its place; but this involves so much expense in alteration and loss of time, that it has seldom been thought worth while to attempt it. It is obvious that a high-pressure cylinder could not be applied close to the old low-pressure cylinder with safety, on account of the extra pressure which it would throw on the beam, and especially on the main gudgeon. This difficulty has been overcome by Mr. M'Naught by a very simple expedient—viz.: by placing the additional high-pressure cylinder on the *crank side* of the beam at about half stroke, where the cold water pump usually stands. By this arrangement, the steam acts on the top of the one piston and on the bottom of the other at the same moment, and, consequently, nearly all the strain is taken off the main gudgeon and entablature. The most important feature in this improvement, is the ease with which it can be applied, as the engine need not be stopped until the high-pressure cylinder is in its place, and the steam pipes prepared, to make the requisite connections. The patent has been very successfully applied to the engines of several large mills in Glasgow, Manchester, and other places; and we hope shortly to be able to report in London also, where the high price of coal, and the small expense of the application of the patent, render it particularly worthy of attention. As a proof of the advantages to be derived from it, we may quote the testimonial of Messrs. Johnston, Galbraith, and Co., of Glasgow:—"Our mill was formerly short of power, being driven by four engines—viz.: two of 50, one of 65, and one of 20-horse power. The patent has been applied to the two of 50 and the one of 20-horse power; and we have been enabled to dispense entirely with the use of the 65-horse power. We save from 30 to 40 per cent. of fuel, have power to spare, and the driving is now much steadier than formerly."

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Detailed particulars can be obtained on personal application, or by writing.

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FOR SALE, 120,000 ACRES of FREEHOLD LANDS, in IRWIN COUNTY; in lots of 490 Acres, at 6s. per acre; and in lots of 25 Acres and upwards, at 8s. per acre. The lands lie between 31° and 32° north; distant from the Atlantic Ocean 120 miles, and at an elevation of 400 feet above its level; free from swamps, climate salubrious and healthy, distant from England 18 or 20 days' sail. They are bounded by the navigable rivers the Flint and the Ocmulgee; by the former, a communication is opened to the Gulf of Mexico; by the latter, to the Atlantic. A RAILROAD, two-thirds finished, passes through the lands, which will connect both these rivers.

The purchasers of the several lots will be entitled to the minerals or products which may be found on the property, thus considerably enhancing the value.—Vessels sail nearly every week from Liverpool to Savanna or Charleston. Passage to either city from £3 to £4 per head; passengers finding their own provisions, &c.—From Charleston and Savanna, the lands are reached by either coach, waggon, or steam-boat.

Every information may be obtained relative to the above, &c., from RICHARD KEILY, Esq., 1, Royal Exchange Buildings, London.

EMIGRATION FACILITATED.—Those persons who expect their friends in AUSTRALIA to ASSIST them in their OUTFIT, might write to their friends there to pay the money into the hands of S. W. SILVER & CO.'S AGENTS in AUSTRALIA, or to their connections in the district, who would be named on application to S. W. SILVER & CO., in London. The agent's acknowledgment would be received by S. W. SILVER & CO., as CASH at the exchange of the day, for the OUTFIT. This proposal will be also communicated through the COLONIAL JOURNALS. EMIGRANTS' fitting-out warehouse at No. 4, Bishopsgate-street (opposite the London Tavern), where colonial information may be obtained, and small parcels received and forwarded to the colonies.

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ANDREW SMITH'S PATENT WIRE ROPE—NOTICE AND CAUTION.—The UNDERSIGNED begs to inform the Public, and especially the MINING, RAILWAY, and SHIPPING INTEREST, that he has become SOLE LICENSEE of Mr. ANDREW SMITH, for the MANUFACTURE and SALE of his PATENT WIRE ROPE; and that he has taken to the premises, late Mr. Smith's, at Millwall, Poplar, where orders will be executed with the utmost attention and dispatch, and on reasonable terms. WILLIAM WILKINS.

Patent Wire Rope Works, Millwall, Poplar, Nov., 1848.

CAUTION.—Persons PURCHASING, or USING, the PATENT WIRE ROPES, NOT MANUFACTURED by the above LICENSEE, are warned that they will be liable to be sued for damages as infringers of Mr. Smith's Patent.

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William Cash, Esq.	Robert Ingham, Esq.
William Miller Christy, Esq.	Charles Lushington, Esq., M.P.
Edward Crewley, Esq.	John St. Barbe, Esq.
John Feltham, Esq.	Samuel Smith, Esq.
Robert M. Holborn, Esq.	William Tyler, Esq.

Samuel Wilson, Esq., Alderman.

PHYSICIANS.

J. T. Conquest, M.D., F.L.S.; Thomas Hodgkin, M.D.

TRUSTEES.

William Cash, Esq.	Samuel H. Lucas, Esq.
John Feltham, Esq.	Charles Lushington, Esq., M.P.

BANKERS—Messrs. Brown, Janson, and Co.

SOLICITORS—Messrs. Hardwick and Davidson.

CONSULTING ACTUARY—Charles Ansell, Esq., F.R.S.

SECRETARY—Joseph Marsh, Esq.

REPORT of the DIRECTORS for 1848, presented to the THIRTEENTH ANNUAL MEETING of MEMBERS, held at the London Tavern, Bishopsgate-street, Dec. 16, 1848.

SAMUEL HAYHURST LUCAS, Esq., in the chair.

The directors have much pleasure in laying before the members, in their Thirteenth Annual Report, the following statement of the business of the institution during the past year. In that period 1673 proposals for assurance have been submitted to the board; of these 1423 have been accepted, and policies thereon issued, the annual premiums on which amount to £24,475 5s. 5d.; 137 more have been accepted, but the policies have not yet been completed; the remaining 113 proposals the directors have deemed it prudent to decline.

The annual income is increased to £126,232 7s. 6d., notwithstanding the reduction on premiums, amounting to the sum of £10,716 3s. 6d., allowed to those members who chose this mode of appropriating the profits.

The total amount of bonuses assigned in 1847, to policies on which the original premiums continue to be paid, is £37,934 4s. in addition to the sums assigned in 1843.

The accounts to the 20th November last have been duly audited; the balance of receipts over disbursements for the year is £73,655 19s. 3d., making the capital stock of the institution at that date £440,028 16s. 3d., which is invested in real and government securities. The sums paid for claims on policies of deceased members from the commencement of the institution, including the bonuses assigned thereto, amount to £111,339 10s. 1d.; of which £16,250 10s. has been paid within the last 12 months, and the sum of £7749, not yet applied for, remains due on this account.

The foregoing summary, exhibiting such successful results in the short space of 13 years, attests both the prosperity and usefulness of the institution, and the peculiar advantages afforded by the entirely mutual system of assurance on which it is founded.

The directors who retire this year, according to the provision of the third rule, are Thomas Castle, Esq., and Samuel Smith, Esq. There are, therefore, two vacancies to be filled, for which a ballot will be taken at One o'clock. The names and addresses of the candidates have been forwarded to the members.

The following Instances illustrate the Reduction in Premiums and equivalent Bonuses on Policies in Class 9, payable at death.

Policies in existence.	Age at commencement.	Sum Assured.	Amount of Bonus.	Original Premium.	Reduction in Premium in lieu of Bonus.	Equal to a reduction on the original premium of
Years.	Years.	£	£ s. d.	£ s. d.	£ s. d.	Per Cent.
12	28	2000	773 7 0	149 16 8	83 13 0	56
	32	1000	166 9 0	26 5 10	10 9 7	40
10	50	1000	213 4 0	45 10 10	19 0 10	42
	27	700	91 6 0	16 5 6	5 11 9	34½
9	58	500	104 9 0	30 8 9	11 19 10	39½
	32	2000	222 2 0	52 18 4	17 8 4	32½
6	60	5000	826 0 0	329 11 8	119 15 10	36
	27	2000	169 5 0	46 10 0	14 6 8	31
5	65	800	48 4 0	24 13 6	8 15 11	36
	30	2000	137 10 0	50 3 4	15 0 0	30
4	62	1000	119 5 0	71 14 2	20 13 2	29
	28	500	26 12 0	11 18 4	2 14 10	23
3	54	1000	65 10 0	52 7 6	9 14 2	18½
	21	3000	111 0 0	60 7 6	10 5 0	17
2	57	500	33 2 0	29 5 6	3 10 8	12
	29	1000	25 19 0	24 9 2	2 12 9	10½
1	59	2000	46 10 0	126 11 6	7 4 2	5½
	24	500	6 1 0	11 12 6	0 11 9	5

Signed on behalf of the directors, S. H. LUCAS, Chairman.

London, Dec. 12, 1848. JOSEPH MARSH, Secretary.

At the above meeting a ballot was taken to supply the two vacancies in the board of directors, occasioned by the retirement of Thomas Castle, Esq., and Samuel Smith, Esq., when the chairman announced the election to have fallen on Charles Gilpin, Esq., and Robert Sheppard, Esq.

RIDER'S RAILWAY BRIDGE.—TO RAILWAY COMPANIES.—This BRIDGE has now been for 18 months in DAILY USE (having a double track) on the HARLEM RAILWAY, in the State of New York, United States. The Erie Railway and the Newhaven Railway Companies have likewise adopted it.

Several other bridges, for ordinary purposes, are also being constructed.

The advantages of this over all other iron bridges hitherto invented, consist in the small amount of iron required, compared with the strength obtained, in avoiding the use of any surplus weight of material, in the consequent economy of its construction, and also from its lightness, easy mode of putting together, and facility of transport, in its peculiar adaptation for foreign use.

As regards economy, it can be erected at a cost not exceeding that of a WOODEN BRIDGE, of equal capability.

Applications to be made to Mr. Moulton, the patentee, Bradford, Wilts.

CAMERON'S COALBROOK STEAM COAL AND SWANSEA AND LOUGHOR RAILWAY COMPANY.—Registered and Incorporated.—Notice is hereby given, that an EXTRAORDINARY GENERAL MEETING of the shareholders of this company will be held in the company's offices here, on Wednesday, the 10th day of January, 1849, at One o'clock in the afternoon precisely, for the purpose of considering a letter from W. B. J. P. Cameron, Esq., addressed to the directors of the company, dated 27th December last, of which letter the following is a copy:—

"To the Directors of Cameron's Coalbrook Steam Coal and Swansea and Loughor Railway Company (Registered)

"Gentlemen,—Four out of five of the committee of shareholders lately dissolved have, since their dissolution (as I understand), in conjunction with certain other shareholders, been illegally endeavouring to prejudice the property of the company by the publication of resolutions purporting to be passed at a meeting of shareholders, and also to make the property appear before the public as of little value, and unlikely to prove remunerative by additional outlay. The injuries they have inflicted on their fellow-shareholders are great, and there is no doubt the damages to which such section of the shareholders have subjected themselves are enormous, both as regards the other shareholders (not parties to their proceedings), the landlord, and myself.

"Under these circumstances, as a very large shareholder in the undertaking, and in that capacity alone, I now address you, and submit the remedy I have to propose for placing the company at once in a prosperous condition. On you, gentlemen, all censure (if any) for the past must necessarily devolve, and for the future I will take all blame, in the event of your adopting the following suggestions.

"In the first place, a sufficient sum must be raised to effect the great winning, and a junction with the Llanelly Railway, and to commence and to continue working from present openings during the progress of the great winning, so soon as such junction is effected.

"Should this be determined on, and myself allowed to superintend the completion of the winning and the railway, as well as the working of the colliery, subject to the approval of your consulting engineer, and under his directions, I am willing to forego all dividends on the shares I hold, until all the other shareholders shall have received 5 per cent. on theirs, for a fixed period of seven years, by which time the sum to be borrowed would have been paid off, as well as all pressing liabilities and current annual expenses: and after the first seven years to pay the shareholders 10 per cent. until their subscribed capital has been refunded, and, when refunded, the property to revert to me.

"You must, I feel confident, admit, if the property would enable me to perform only what I have herein undertaken that it should perform (if placed under my control and direction), you will not consider it to have been a very bad investment—namely, yielding 5 per cent. for seven years, and 10 per cent. for future years, until capital is redeemed; all this promised to be effected at a time when others are endeavouring to persuade the shareholders that they are on the brink of ruin.

"Should you not accede to this proposal, which I have made without prejudice, I hope that either of you, or some other party, will devise a better plan, and submit it to you for your consideration. I think you will all agree that any plan is better than going to law; and I make this proposal, having perfect confidence in the value of the mine, and that it will, if properly managed, fully realise all that has been promised; and I shall cheerfully give my name, in conjunction with any others that may be required, as security for raising the amount necessary to carry out these objects effectually, and without further delay, being confident that I shall have made a good bargain for myself in the proposal I have made to you, and that in the present state of the company, it would be equally advantageous for the shareholders should you accept it on their behalf, subject to the approval and confirmation of the shareholders, at a general meeting to be specially called for that purpose, and the proposal and acceptance to be without prejudice to either party, and of no effect until so approved and confirmed at such meeting.

"I have the honour to be, Gentlemen, your obedient servant,

"London, December 27, 1848." (Signed) "W. B. J. P. CAMERON.

And of entering into such resolution or resolutions in respect thereof, as the said meeting shall determine. By order of the board of directors,

A. C. HOWDEN, Secretary.

Company's offices, 2, Moorgate-street, London, December 27, 1848.

CAMERON'S COALBROOK STEAM COAL AND SWANSEA AND LOUGHOR RAILWAY COMPANY.—The Complainant Shareholders' Committee have, as shareholders, received a circular, intimating that an "Extraordinary General Meeting will be holden at Moorgate-street, on Wednesday, January 10, to consider a letter addressed by W. B. J. P. Cameron, Esq., to the directors of the Company." Notice to this effect also appeared in the *Times* of 29th ult.

The committee are glad to find that the proceedings of the shareholders, thus far only, have been deemed by Mr. Cameron sufficiently indicative of what may hereafter happen to suggest at his hands a concession of some sort. Such an act on his part, on the eve of a Chancery suit, is not without value; but regarded in any other light, the committee unhesitatingly pronounce Mr. Cameron's proffered terms as utterly worthless—a second edition of the prospectus, saying, in fact, thus much and no more:—"Bind yourselves, as shareholders, and your estates hereafter, to such further outlay upon my father's property as I may choose to ask; give me the entire, sole control of everything, ask no questions, and quietly trust to my word."

The shareholders are recommended very carefully to observe that the letter is addressed by Mr. W. B. J. P. Cameron (the son) only, and only proposes for a time to forego dividends. Colonel Cameron (the father), the alleged landlord, and Mr. N. P. Cameron (the brother), chairman of the company, a party to the alleged lease, do not at all appear. Entire silence is also preserved as to the enormous premium and royalty, and the heavy liabilities by which the company, the shareholders, and the property are sought to be irrecoverably burdened.

Fortunately for the shareholders Mr. Cameron's extraordinary document is to be without prejudice and of no effect, unless the shareholders shall confirm it—that is, unless the shareholders shall see as he does, and commit themselves and their estates, hand and foot, to his pleasure. In like manner, also, this communication must be considered as without prejudice. The following statements will present the shareholders with a brief exposition of the material points of Mr. Cameron's letter, and with the comments of the Committee thereon.

1. If the shareholders will advance more money?

The report of July last asks for 30,000*l.* Mr. Cameron now, and "in the first place," requires a "sufficient sum." What may follow in the "next place," or what Mr. Cameron may hereafter choose to think a "sufficient sum," the shareholders are not at present to be told. They will no doubt learn in due time. It might not probably be expedient to state all that may be ultimately intended, especially until the shareholders shall have first committed and involved themselves thus much further.

2. "To effect the great winning and a junction with the Llanelly Railway."

The shareholders were led to expect a "great winning" in the prospectus of 1845. They provided the funds asked for the purpose, and now the mine is altogether closed. Will they, in 1849, try the same experiment again, upon no other security, than Mr. W. B. J. P. Cameron's management and guarantee? If the Llanelly line was of any use, why did not Mr. Cameron and his co-directors make it long since, when there were ample funds for it? Why, now, when the money has been spent in other things, is it so strenuously recommended? The fact is, the directors did think, as the committee now think, that the line, under present circumstances, would be a complete waste of money, except as an appendage to Colonel Cameron's estate.

3. Mr. Cameron is willing, first devolving "all censure (if any) for the past" on his co-directors, and "for the future all blame" to himself.

Mr. Cameron, then, agrees with the committee that censure is due for the past, and finds it convenient to screen himself at the expense of his co-directors. Blame for the future he is willing to take upon himself, but the committee consider that such blame will properly belong to the shareholders if they concede their rights and interests any further.

4. "To forego all dividends on his shares, till the shareholders shall have received five per cent. on theirs for a fixed period of seven years, and afterwards ten per cent. until the subscribed capital shall have been refunded, the property then reverting to him."

It may be plausible and easy to forego dividends which, though long promised, have not yet and may never legitimately appear, meanwhile holding ample security. It may also be quite safe for the shareholders to allow Mr. Cameron to receive his dividends, when for seven years they shall have had theirs at the rate of 5 per cent., and the whole property to revert to him after the shareholders shall have had 10 per cent. dividends and their principal money back. When, however, all this is to be—how it is to accrue—or what may happen in the interim is not explained; so far as appears, all rests upon the unsustained allegations of Mr. William Booth Joseph Price Cameron, a party to the prospectus, to subsequent proceedings, and to the present condition of the company. Let the shareholders observe that this vague, undefined, preposterous offer is all that is proposed in the shareholders for their further advance of £30,000 more money, or of (to adopt the more recent and cautious phraseology) a "sufficient sum."

5. "If the property will enable him to perform only what he has undertaken it should perform." This "if" is a very convenient, but most suspicious proviso. If Mr. Cameron has a doubt about the results, what may not the shareholders apprehend?

6 "And that the property be placed under his control and direction." Why, where has it been ever since 1845? and why is it now so essential to future profitable working that Mr. Cameron alone must control? Already Mr. Cameron has appeared as the alleged vendor, and also as provisional committeeman, manager, and director, with influence and votes to do what he chose or could for the shareholders, yet, notwithstanding, the mine is closed, and the affairs of the company, according to the solicitor, are on the "borders of bankruptcy." The past, therefore, so far as this property is concerned, does not say much for the value of Mr. Cameron's future services.

7. ".. and cheerfully give his name, in conjunction with any others that may be required, as security for raising the amount necessary to carry out these objects effectually."

Mr. Cameron's family already having firm hold upon the property itself, Mr. Cameron can easily afford "cheerfully to give his name," and if his own name will suffice the committee will raise no objection, but when is added "in conjunction with any others," it becomes those others, whoever they may be, before making themselves responsible, to consider that they are not of the family, and have no such firm hold, as have the family, upon the property itself. Hence they cannot afford quite so "cheerfully" as Mr. Cameron can to charge themselves and their estates with the liabilities to the extent of 30,000*l.* or of a "sufficient sum," to which under the Joint Stock Companies' Acts they may be made liable.

8. All this being done, Mr. Cameron "thinks that he will have made a good bargain for himself." Doubtless.

9. "And that any plan is better than going to law."

Hatred of law is so novel in a director of this company, that a profession of it at the present moment suggests an inquiry as to the cause of the new-born dislike. It cannot have existed long, or the shareholders would not have already been so heavily taxed with law charges, nor be now liable (as it would appear) for a large further sum. Nor would the directors have felt themselves justified in resolving (as a few days ago only they did) to the effect that the solicitor be authorized to consult counsel whenever he might please. May not the real reason be that, heretofore, and up to the present time, the shareholders' cash and estates have been looked to as supplying the necessary funds; but that henceforward, that responsibility may rest upon the directors themselves. "Hinc illæ lachrymæ."

The shareholders have long since shown their dislike to law, by counselling the directors studiously to avoid it. Circumstances are, however, now different, and the committee prefer intrusting their interests to a court of equity, than to Mr. Cameron, his relatives, or a board of directors, where he appears to do as he pleases.

The shareholders will be shortly further advised as to the course to be taken with respect to the contemplated Extraordinary General Meeting. Jan. 4, 1849.

COMBINED VAPOUR ENGINE.—This invention is applied either to a single engine, with two cylinders and pistons, or, as is usual for marine purposes, two distinct engines with a cylinder and piston each. One of the pistons is acted upon by steam, and the other by the vapour of Perchloride, or of any other easily vaporized liquid. The steam is generated and applied as in the ordinary engine; but, upon its escape from the first cylinder, after having exerted its expansive force therein, it passes into a case, termed a vaporiser, containing a number of small tubes charged with Perchloride, or some easily vaporised liquid, penetrates into the space between, and thus comes into contact with the entire surface of the tubes. Immediately upon the steam coming in contact with the surface of the tubes so charged, a large portion of its caloric is absorbed by the liquid, which is thereby vaporized; and the steam, being deprived of its caloric, becomes immediately condensed, and is then returned into the steam-boiler, or, being by this process perfectly distilled, may be applied for culinary or any other purposes for which pure water is required. The vapour obtained, by the action of the steam upon the liquid in the tubes, is conducted into the second cylinder, and, after exerting its elastic force (which is greater than that of steam) upon the piston, is condensed, and by means of a force-pump, returned into the vaporiser, which it thus keeps regularly supplied, and is alternately vaporized and condensed.

Cards of admission, to view the working of the engine, may be obtained by application to Mr. B. Talbot, at 47, Bedford-row, between the hours of Twelve and Three o'clock.

THE GENERAL TELEGRAPH COMPANY—(Under Royal Letters Patent)—are enabled to EXECUTE, by CONTRACT or OTHERWISE, the most approved ELECTRIC TELEGRAPHS, with the best insulation yet attained.

Applications for terms, &c., to be made to the secretary, at the company's offices, 3, John-street, Adelphi, London.

Under the sanction and patronage of His Royal Highness PRINCE ALBERT, Lord-Warden of the Stannaries, Chief Steward of the Duchy of Cornwall and Devon, &c.

Will be published on the 2nd of January, 1849, price 6s.,

THE MINING ALMANACK FOR 1849: being a Yearly Compendium of Information on General Science; with Statistical Details relating to the Mining Interests of Great Britain. Compiled and arranged by HENRY ENGLISH, Mining Engineer, Editor of the *Mining Journal*, &c.—This work will contain, in addition to Commercial Intelligence with important Statistical and Tabular Matter—Parliamentary and Official Returns from the Mining Districts, made up to the 31st December, 1848—Original Papers on Geology, Mineralogy, Metallurgy, Practical Mining, Engineering, and Mechanics—Abstracts of the Statutes affecting Joint-Stock Companies—A comprehensive Treatise on the Cost-Book System and the Stannaries Courts—Rules applicable to the working of Mines and Collieries—Lists of Members of Scientific Bodies—and other valuable information connected with the various branches of science.—Published at the office of the *Mining Journal, Railway and Commercial Gazette*, 26, Fleet-street.

GOLD WASHINGS AND ALLUVIAL DEPOSITS IN CALIFORNIA and OTHER PARTS of the PACIFIC COAST—their formation and mode of extraction.—An interesting PAPER, treating on the above, by EVAN HOPKINS, Esq., C.E., F.G.S., will appear in the forthcoming volume of the *Mining Almanack*.—Published at the office of the *Mining Journal*, 26, Fleet-street.—Price 6s.

TO CONSUMERS OF GAS.—The PATENT GAS-LIGHT MONITOR—ADAPTED to EVERY DESCRIPTION of BURNER, and SUPPLIED at a COST placing it within the REACH of EVERY CONSUMER—regulates the flame of gas-lights to any required height—economising the consumption, and preventing the danger and inconvenience arising from the flaring of lights.

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NATIONAL GAS BURNER.—After 18 months' trial, accompanied, in many instances, by severe tests, the result of which has enlisted unqualified approbation, the NATIONAL ECONOMIC GAS BURNER stands pre-eminent.

Testimonial from Samuel Clegg, Esq., Consulting Gas Engineer.

I hereby certify, that I have examined the National Economic Gas Burners of Messrs. Paul and Co., London, and find the consumption per hour of cubic feet of gas, at a pressure of 5-10th of an inch to be respectively—No. 0, 4 feet; No. 1, 6 feet; and No. 2, 10 ft.; at the same time the illuminating power is very great, the light remarkably steady, with freedom from smoke or smell of gas, with great purity of light; and, in my opinion, they are decidedly the best patent gas burners in use. SAMUEL CLEGG.

London, Nov. 9, 1848.

May be seen burning, and can be tested by an experimental meter, at the office of PAUL & CO., Gas Engineers and General Gas Fitters, No. 43, Skinner-street, Snow-hill, London.—A detailed Description and Diagram, with testimonials at length, forwarded, post-free, on application.

PATENT ALKALI COMPANY'S IRON PAINT.—This PAINT is the PRODUCT of a PATENT PROCESS, and possesses PECULIAR and VALUABLE PROPERTIES, not otherwise attainable.

Its colour (as at present produced) is a rich *purple-brown*. It is perfectly free from the deleterious qualities of white lead.

It surpasses all other paints ever yet discovered, in point of *durability* and *economy*. Two coats of this paint are more than equal to three of any other description.

From its chemical composition, it is pre-eminently adapted for covering *iron*; also *wood*, and *stuccoed*, or *brick buildings*. The process by which the base of this paint is produced, makes it impossible that any change should take place in its composition from atmospheric influence. Its identity with iron secures it from galvanic action, so fatal to the durability of lead and other paints on iron work.

It has been exposed on shipping to the action of sea-water, and of the sulphuretted hydrogen, so prevalent in sea-ports and tidal harbours, for more than three years, without change.—Its *cheapness* and *strength* render it peculiarly suitable for *iron bridges, roofs*, and *railings, farm buildings*, and *shipping*. It will also cover creosoted timber.

Price, by the ton, £25, delivered in London, exclusive of package.

Agents will be appointed for the principal towns in the United Kingdom; in the mean time, orders may be addressed to the offices of the company, No. 20, Fenchurch-street, London. JOHN A. WEST, Secretary.

PATENT MINERAL PAINT.—After three years' trial on the sides and bottoms of iron and timber-built ships, this PAINT has proved itself equal to copper as a protection from vegetation, as well as the sea-worm and all other adhesive matter. It is also peculiarly adapted for spouts and gutters, iron railing, felt or wooden roofs, tarpaulings, damp walls, or any other surface that requires to be made waterproof at a small cost, and is ready for use, in casks of 2 to 20 gallons.

Brilliant black, 2s. per gallon—Rich brown, 2s. 9s. per gallon.

EMERSON'S PATENT LIQUID CEMENT.—This valuable and economic PAINT is so adhesive, that it will cling to any surface—brick, Roman cement, and all other plastered work; and, being a rich cream colour, is more pleasing and natural in appearance than oil, and at an *eighth* of the *cost*. It is ready for use, will dry in a few hours, and possesses the property of protecting the walls as well as Roman cement. Sold in casks of 1 cwt. 2 cwts., and 3 cwts., at 8s., 15s., and 21s. per cask. GEO. LEAR & CO., Sole Agents, 16, Basing-lane, Cheapside.

NEUBER'S IMPROVED LIQUID GLUE is IMPERVIOUS to DAMP or HEAT, without smell, and equal, if not superior, in strength to any other glue. It is used as a cement for iron, wood, stone, marble, ivory, glass, china and earthenware, plaster models, for every description of fancy work, and for household purposes. It may be used at a moment's notice, and requires no preparation.—Price, dark, 8s.; pale, 10s. per gallon; and in bottles at 6d., 1s., and 1s. 6d.

NEUBER'S IMPROVED WATER VARNISH is without smell, perfectly washable, produces an elegant and durable polish, and requires no preparation of size.—Price, full body, 10s.; flat, 8s., per gallon; and in bottles at 6d., 1s., and 1s. 6d.

Sold, wholesale and retail, by Messrs. NEUBER & WATSON, Varnish and Japan Manufacturers, 4, Endell-street, Broad-street, Holborn, where samples may be obtained, or forwarded free on receipt of 12 postage stamps.—Retail warehouse, 76, Long-acre, two doors from Drury-lane.

N.B. Respectable local agents are required for the sale of these articles in the provinces.

CAUTION.—"One of the most useful articles that can be possessed is Robinson's Patent Liquid Glue."—*Times.* From the acknowledged excellence of ROBINSON'S PATENT LIQUID GLUE, which may now be had in nearly every important town in the kingdom, has arisen numerous spurious imitations. Be particular to ask for Robinson's Patent Liquid Glue—none else is genuine. Neither time nor climate, hot nor cold fluids, affect it.—"It unites permanently severed glass, china, wood, cast-iron, stone, or marble."—*Douglas Jerrold's Weekly Newspaper.* "An extremely valuable addition to the store of domestic requisites."—*Atlas.*

In bottles, price 1s.—Depôt, No. 76, High Holborn, opposite the George and Blue Boar, London; may also be had of Wm. Hobbell, 2, Astey's-row, Lower-road, Islington.

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Established upon the mixed, mutual, and proprietary principle.

Rates essentially moderate.—Every description of policy granted. Immediate bonus, and deferred annuities; and endowments to widows, children, and others.—Every policy (except only in cases of personation) indisputable.—The assured permitted to go to and reside in Canada, Nova Scotia, New Brunswick, Australasia, the Cape of Good Hope, and Prince Edward's Island, without additional premium.—Medical men remunerated for their reports.—Loans granted on real or personal security.—One-tenth of the entire profits appropriated for the relief of the assured while living, and of his widow and orphans.—Annuities granted in the event of blindness, insanity, paralysis, accidents, and any other bodily or mental affliction, disabling the parties.—Persons of every class and degree admitted to all the advantages of the corporation.—Rates for assuring £100 at the age of 25, 35, 45, and 55, respectively—namely, £1 14s. 5d., £2 5s. 6d., £3 4s. 3d., and £4 18s. 6d.

Prospectuses, with full details, may be had at the office.—Applications requested from parties desirous of becoming agents. EDWARD BAYLIS, Actuary and Secretary.

Offices, 76, Cheapside, London.

London: Printed by RICHARD MIDDLETON, and published by HENRY ENGLISH (the proprietors), at their offices, No. 26, FLEET-STREET, where all communications are requested to be addressed. [January 6, 1849.